THOMSON MULTI MEDIA

Brandt FERGUSON SABA TELEFUNKEN THOMSON

AUDIO

SERVICE MANUAL
DOCUMENTATION TECHNIQUE
TECHNISCHE DOKUMENTATION
DOCUMENTAZIONE TECNICA
DOCUMENTACION TECNICA

THOMSON **AM 1580**
AM 2080
AM 2180

Version (PC*): A

*PC: The version code is indicated either in the battery compartment or on the back of the unit - ce code version est indiqué dans le compartiment à piles ou au dos de l'appareil - PC: Version des Geräts wird im Batteriefach oder auf der Rückseite angegeben - il codice della versione è indicado nello scompartimento delle batterie o sul retro dell'apparecchio - el código de la versión está indicado en el compartimento de las pilas o en la parte trasera del aparato.

Technical data - Caractéristiques principales
Technische Daten - Dati tecnici - Caracteristicas del aparato

Type of set : **Type d'appareil :** **Geräteart :** **Tipo d'apparecchio :** **Tipo de aparato :**	Cassette radio recorder / compact disc Combiné radio cassette / CD CD-Radio Cassetten Portable Insieme radio cassette / CD Radio cassette / CD		185 mm ↕ 240 mm ↗ 335 mm 4,5 kg
Power supply : **Alimentation :** **Stromversorgung :** **Alimentazione :** **Alimentación :**	230 V ~		**Nominal output power :** **Puissance nominale de sortie :** **Nennausgangsleistung :** **potenza nominale di uscita :** **Potencia nominal de salida :** 2 x 25 W (Rms) 2 x 50 W (Music.)
	FM - MF : **MW - PO :** **LW - GO :** 87,5 - 108 MHz 522 - 1620 kHz 146 - 281 kHz		**Sensitivity :** **Sensibilité :** **FM - MF :** 20 µV (S/N = 30 dB) **Empfindlichkeit :** **MW - PO :** 1000 µV/m (S/N = 20 dB) **Sensibilità :** **LW - GO :** 2500 µV/m (S/N = 20 dB) **Sensibilidad :**
	Frequency response : **Courbe de réponse :** **Frequenzgang :** **Curva di risposta :** **Curva de respuesta :** 125 Hz - 8 kHz (+3 / - 3 dB)		**Signal to noise ratio :** **Rapport signal / bruit :** **Geräuschspannungsabstand :** 40 dB **Rapporto segnale / disturbo :** **Relación señal / ruido :**
	Wow and fluttter : **Fluctuations :** **Gleichlauf :** **Fluttuazioni :** **Fluctuaciones :** 0,35 %		→ 4,75 cm/s << ▶▶ >> << ◀◀ >> C60 : 170 s
DAD	**Disc rotation speed :** **Vitesse de rotation du disque :** **CD-Drehgeschwindigkeit :** 200 ➡ 500 tr/m **Velocità di rotazione del disco :** **Velocidad de rotación del disco :**		**Frequency response :** **Courbe de réponse :** **Frequenzgang :** **Curva di risposta :** **Curva de respuesta :** 100 Hz - 16kHz (-2/+2 dB)
	Stereo separation : **Diaphonie :** **Übersprechdämpfung :** 45 dB **Diafonia :** **Diafonía :**		**Signal to noise ratio :** **Rapport signal / bruit :** **Geräuschspannungsabstand :** 54 dB **Rapporto segnale / disturbo :** **Relación señal / ruido :**

WARNING : *Before servicing this chassis read the safety recommendations.*
ATTENTION : *Avant toute intervention sur ce châssis, lire les recommandations de sécurité.*
ACHTUNG : *Vor jedem Eingriff auf diesem Chassis, die Sicherheitsvorschriften lesen.*
ATTENZIONE : *Prima di intervenire sullo chassis, leggere le norme di sicurezza.*
IMPORTANTE : *Antes de cualquier intervención, leer las recomendaciones de seguridad.*

Code : 356 633 20 - 1202 / 3,7M - CRKD2104-CRKD2105-CRKD2107 Print.

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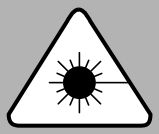


CLASS 1 LASER PRODUCT
APPAREIL A LASER DE CLASSE 1
LASER KLASSE 1
APPARECCHIO CON LASER DI CLASSE 1
APARATO CON LASER DE CLASE 1

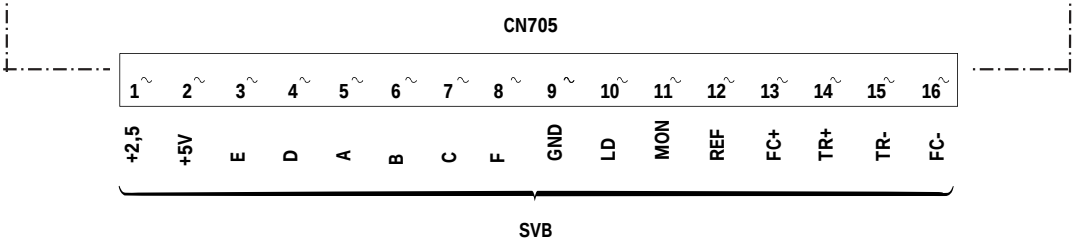
DANGER :	**Invisible laser radiation when open and interlock failed or defeated. Avoid direct exposure to beam.**
ATTENTION :	**Le rayon laser est invisible. Eviter l'exposition directe lors de la maintenance.**
VORSICHT BEI REPARATUREN :	**Bei geöffneter Schublade und Defekt der Sicherheits-vorrichtungen besteht die Gefahr unsichtbaren Laserlichts. Niemals direkt in den Laserstrahl sehen.**
ATTENZIONE :	**Il raggio laser è invisible. Evitare l'esposizione diretta durante la manutenzione.**
IMPORTANTE :	**El rayo laser es invisible. Evitar la exposición directa en el momento del mantenimiento.**

DIGITAL PROCESSING SCHEMATIC DIAGRAM - SCHEMA DU TRAITEMENT DIGITAL - SCHALTBILD DIGITALVERARBEITUNG - SCHEMA ELABORAZIONE DIGITALE - ESQUEMA DEL TRATAMIENTO DIGITAL

AM 1580

The complete Digital Prcessing Module is available from A.S.S. under Part Number :
En SAV, l'ensemble du module traitement digital est géré sous le code :
Die Sevice Bestell-Nr. für das Modul "Digital Processing kompl." ist :
Il codice del modulo completo di elaborazione digitale è :
En postventa, el modulo completo tratamiento digital lleva el côdigo :

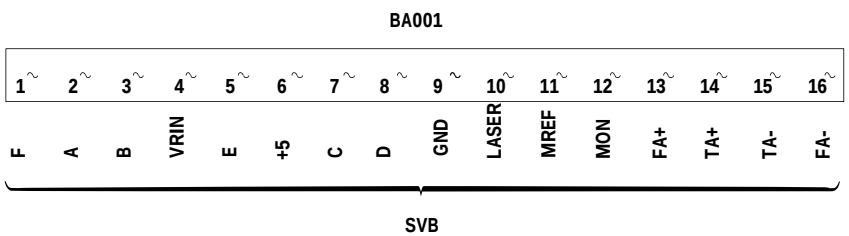
106 06 680



AM 2080
AM 2180

The complete Digital Prcessing Module is available from A.S.S. under Part Number :
En SAV, l'ensemble du module traitement digital est géré sous le code :
Die Sevice Bestell-Nr. für das Modul "Digital Processing kompl." ist :
Il codice del modulo completo di elaborazione digitale è :
En postventa, el modulo completo tratamiento digital lleva el côdigo :

107 57 770

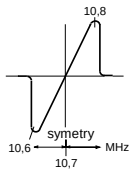


ADJUSTMENTS - REGLAGES - EINSTELLUNGEN - REGOLAZIONI - AJUSTES

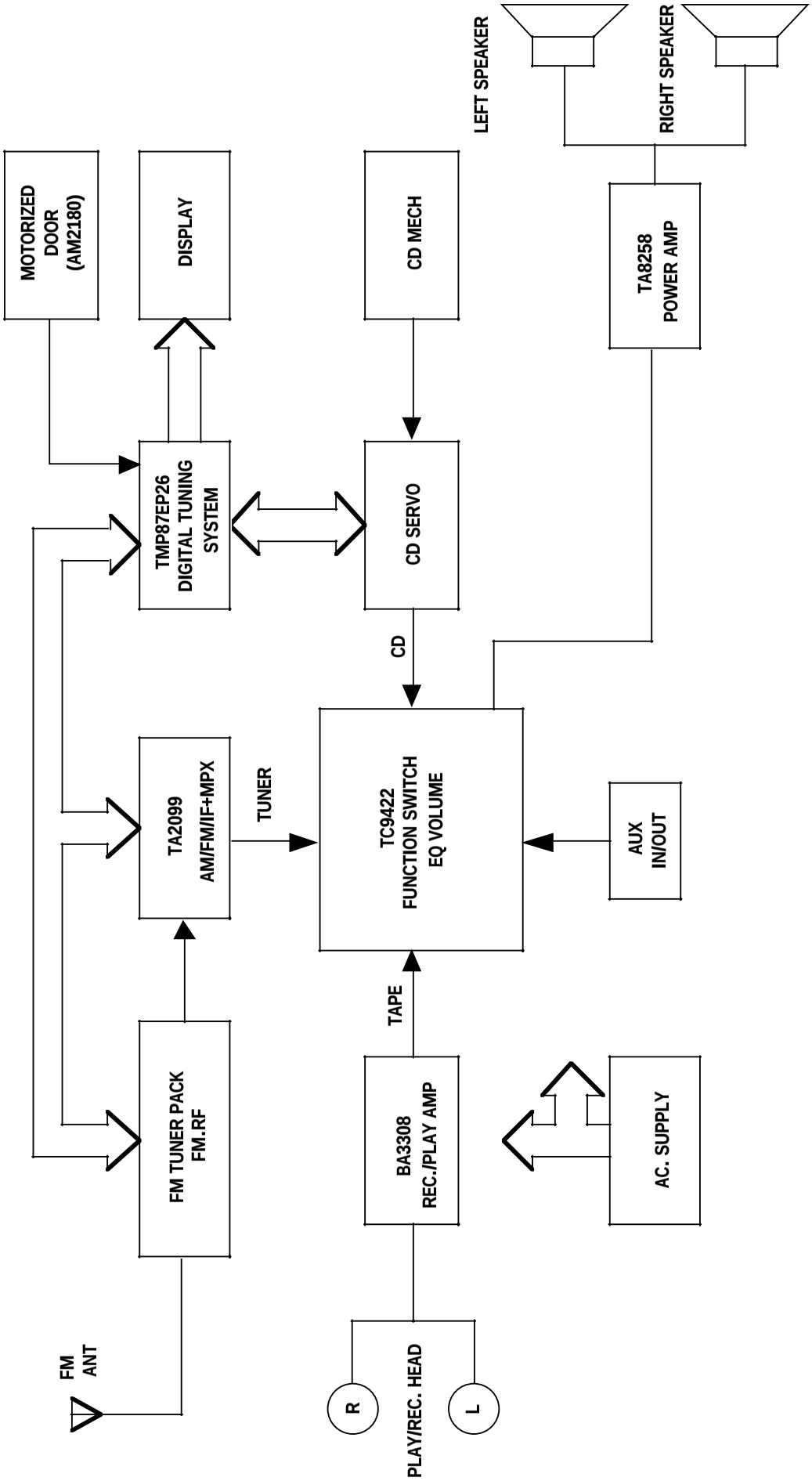
AM alignment

		G f or TP	f	18888 KHZ		V
IF	1		450 kHz	450 kHz	IFT401	Maximum output
MW	2		522 kHz	522 kHz	IFT404	Vt V = 1,5V +/-0,1V
	3		1620 kHz	1620 kHz		Vt V = 8,5 +/-0,5V
LW	4		146 kHz	146 kHz	IFT403	Vt V = 2,5V +/-0,1V
	5		281 kHz	281 kHz		Vt V = 8,5 +/-0,5V
MW	6	G f	612 kHz	612 kHz	IFT405	Maximum output
	7		1404 kHz	1404 kHz	VC401	
LW	8	G f	164 kHz	164 kHz	IFT406	Maximum output
	9					

FM alignment

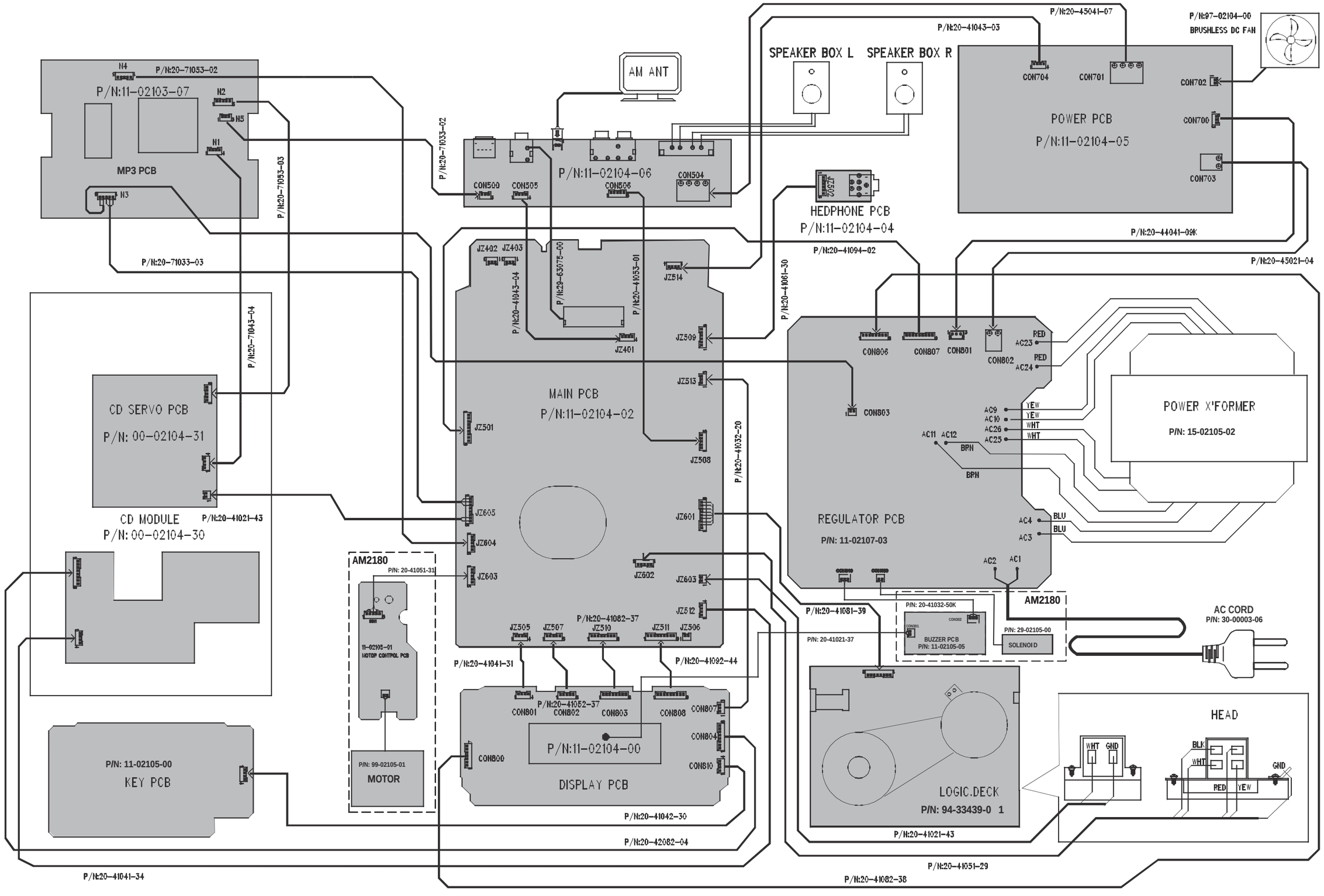
		G f or TP	f	18888 KHZ		V
IF	1		10.7 MHz	10.7 MHz		Max. 
FM	2		87.5 MHz	87.5 MHz		Vt V = 1,7V +/-0,3V
	3		108 MHz	108 MHz		Vt V = 8,25V +/-0,5V

BLOCK DIAGRAM - SCHÉMA SYNOPTIQUE - BLOCKSCHALTBILD - SCHEMA A BLOCCHI - ESQUEMA DE BLOQUES



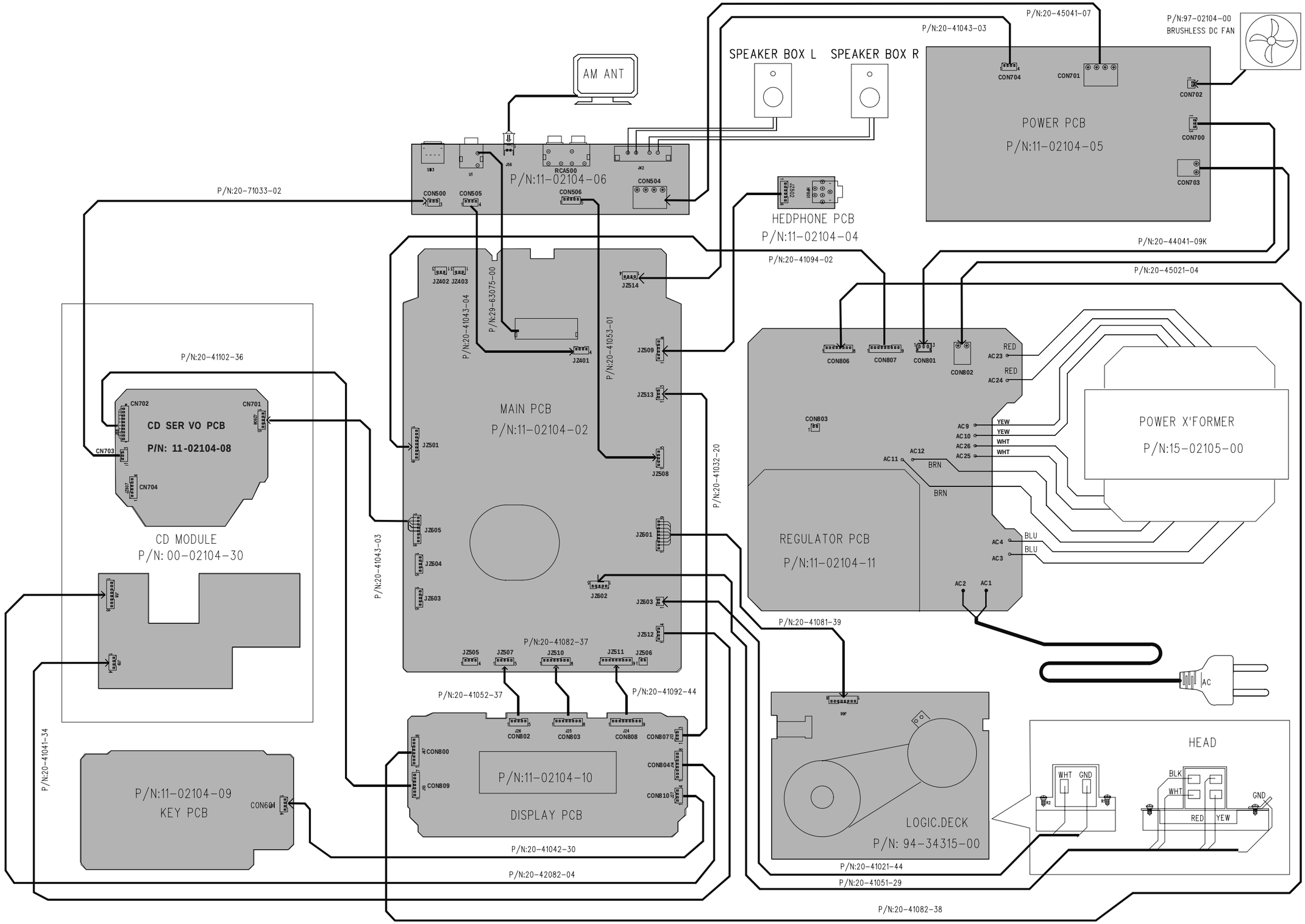
WIRING DIAGRAM - SCHEMA D'INTERCONNEXIONS - VERDRAHTUNGSPLAN - DIAGRAMMA DELLE INTERCONNESSIONI - ESQUEMA DE INTERCONEXIONES

AM2080 / AM2180

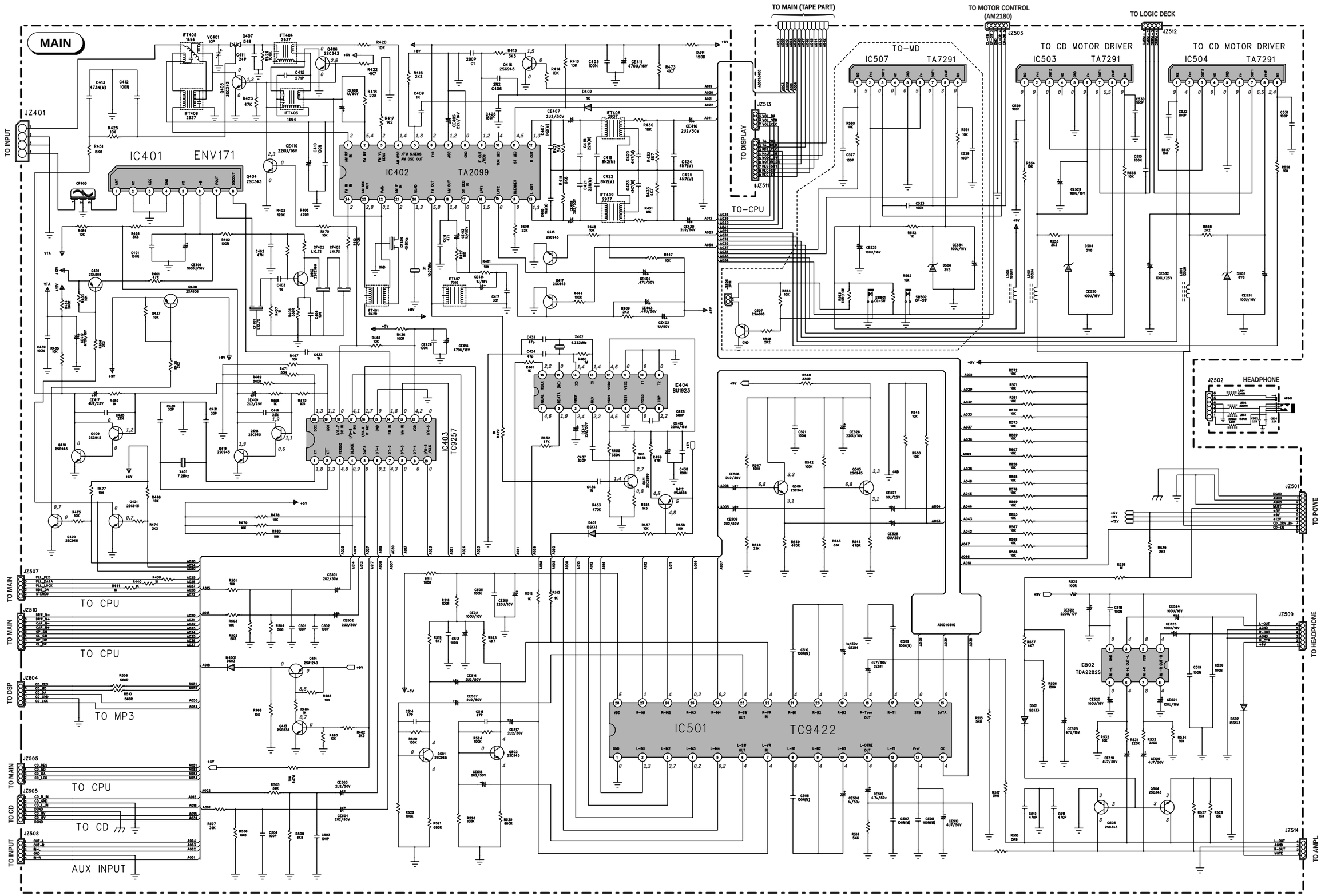


WIRING DIAGRAM - SCHEMA D'INTERCONNEXIONS - VERDRAHTUNGSPLAN - DIAGRAMMA DELLE INTERCONNESSIONI - ESQUEMA DE INTERCONEXIONES

AM1580

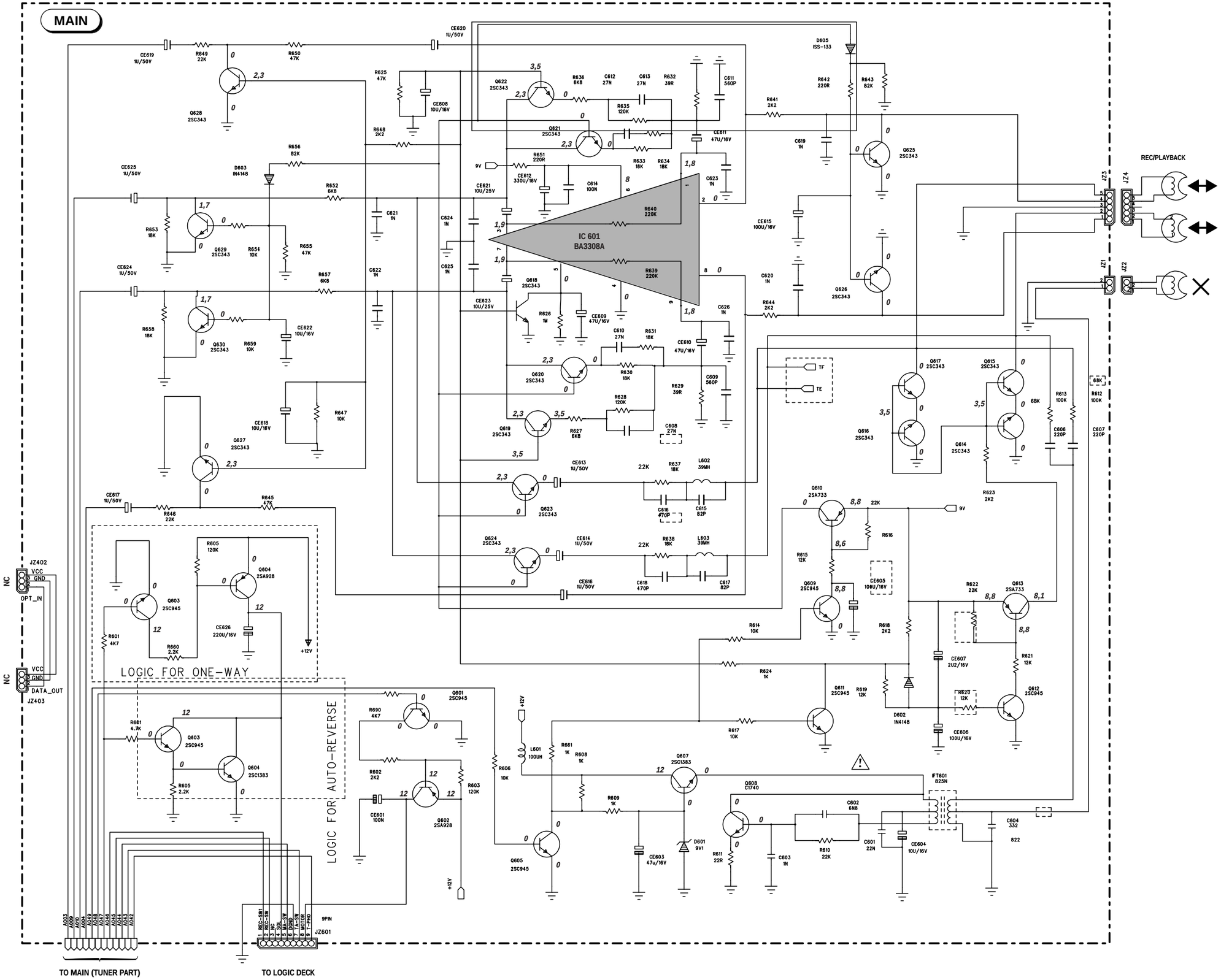


MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD GRUNDPLATTE - SCHEMA DELLA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL (TUNER PART)

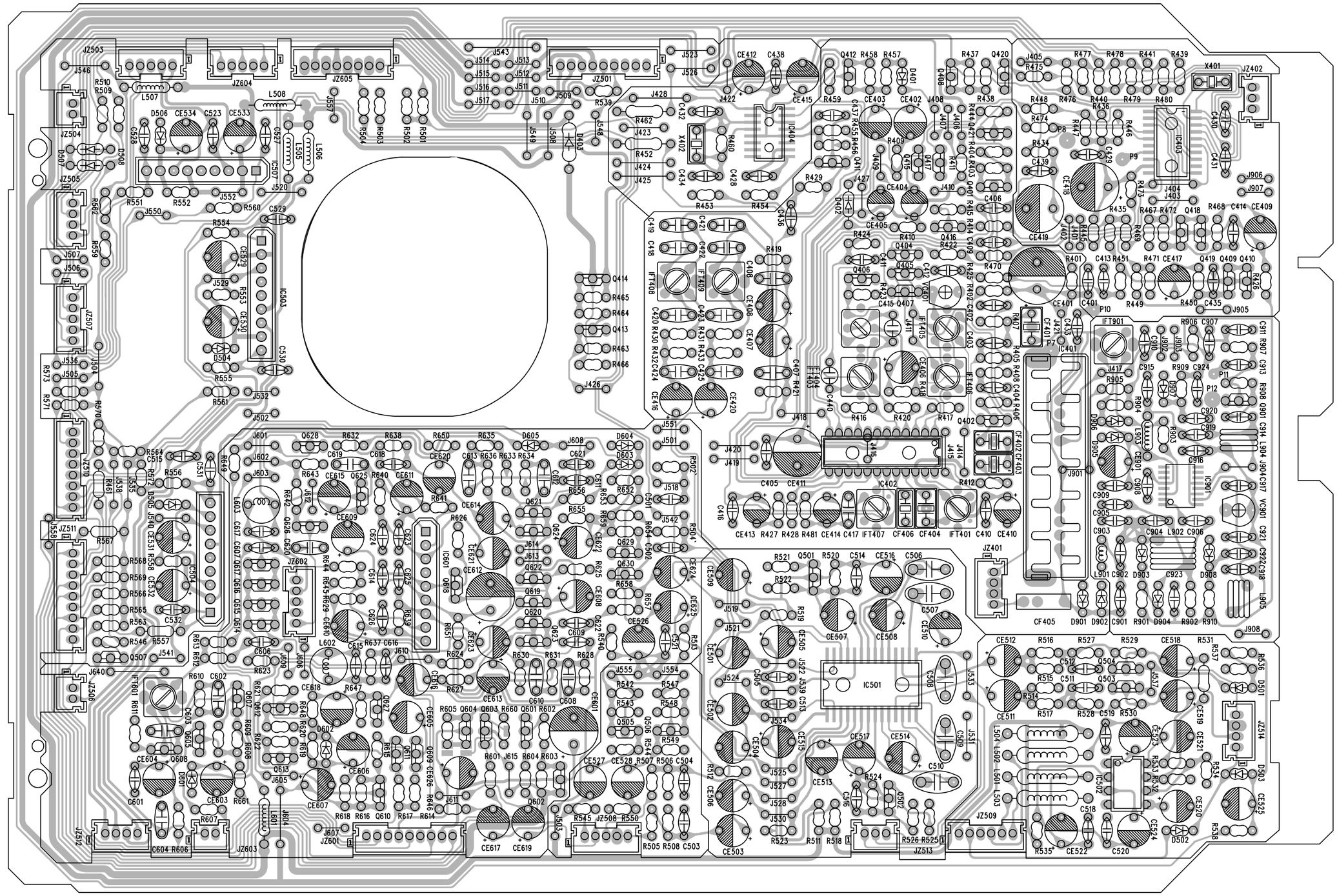


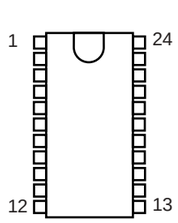
CRKD 2104/2105/2107
First issue 12/02

MAIN SCHEMATIC DIAGRAM - SCHEMA DE LA PLATINE PRINCIPALE - SCHALTBILD GRUNDPLATTE - SCHEMA DELLA PIASTRA PRINCIPALE - ESQUEMA DE LA PLATINA PRINCIPAL (TAPE PART)



Main P.C.B.
Platine principale
Grundplatte
Piastra principale
Platina principal





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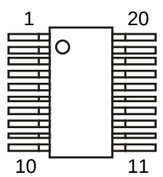

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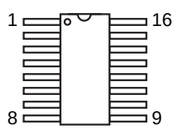
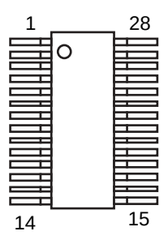


BU1924F



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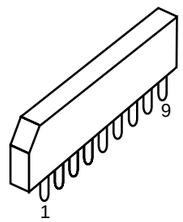

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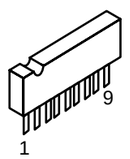

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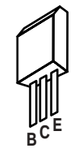
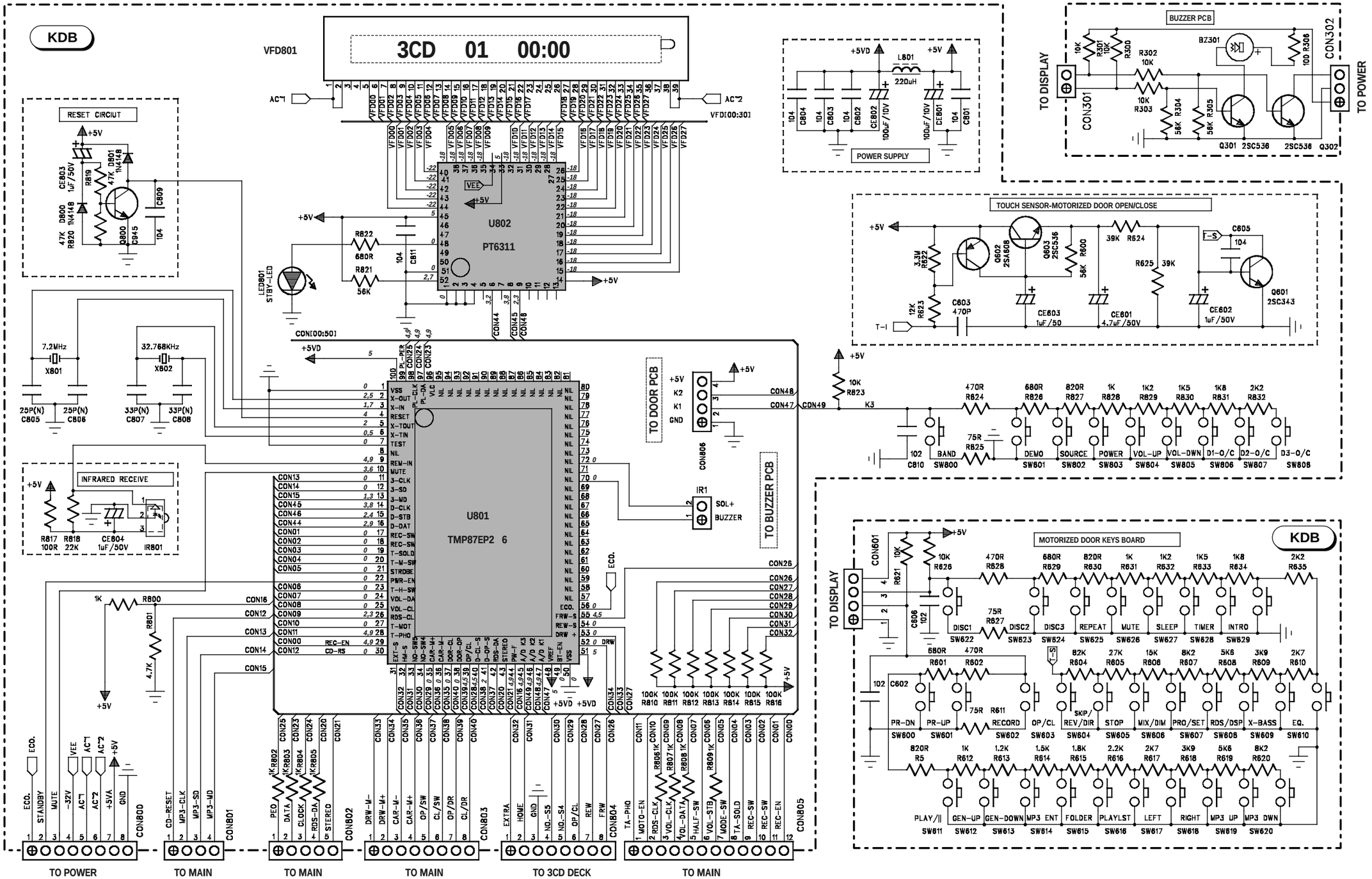
2SC2999



2SB1240

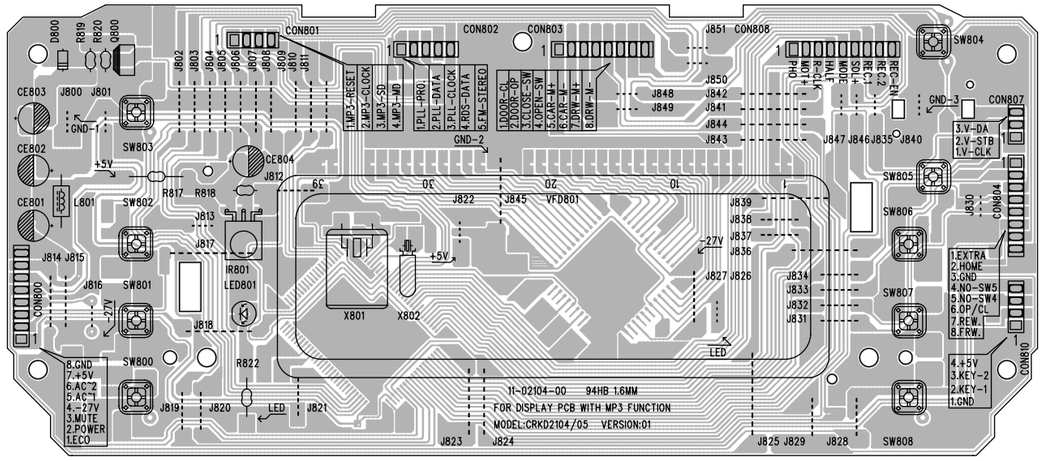
2SC945
2SA608
2SA928

CONTROL / DISPLAY SCHEMATIC DIAGRAM - SCHEMA COMMANDES / AFFICHEUR - SCHALTBILD BEDIENTEIL / ANZEIGE - SCHEMA COMANDI / INDICATORE - ESQUEMA MANDOS / INDICADOR

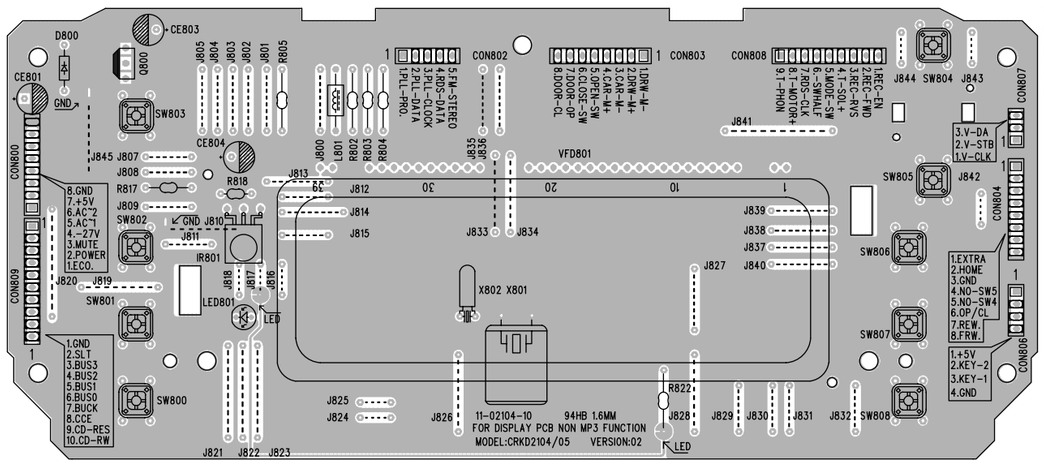


Controls / display P.C.B.
Platine commandes / afficheurs
Ltpl. Bedienteil / Anzeige
Piastra comandi / indicatore
Platina de mandos / indicadores

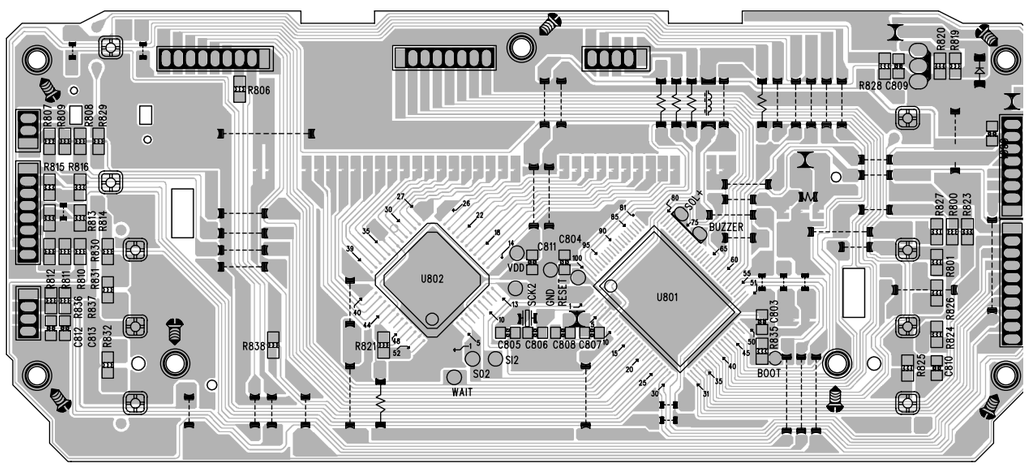
AM2080/2180



AM1580



Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes

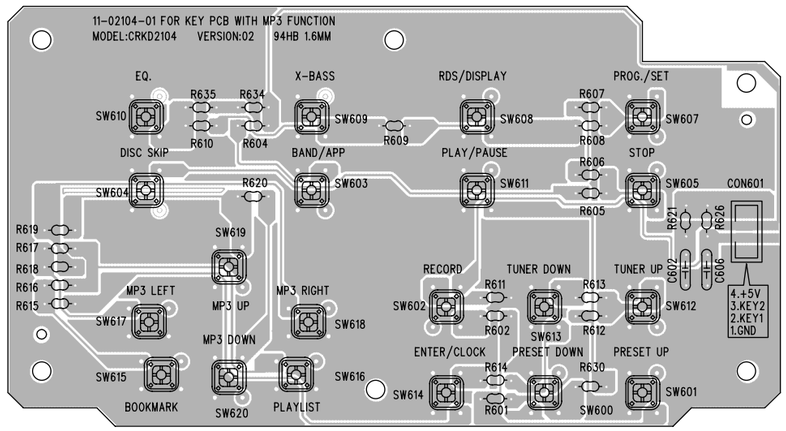


Solder side
Côté soudure
Lötseite
Lato saldature
Lado del cobre

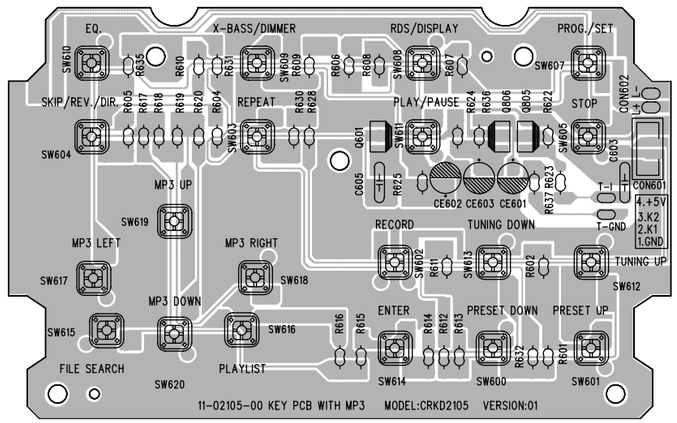
CRKD 2104/2105/2107
First issue 12/02

Key P.C.B.
Platine touche
Ltpl. Taste
Piastra tasto
Platina tecla

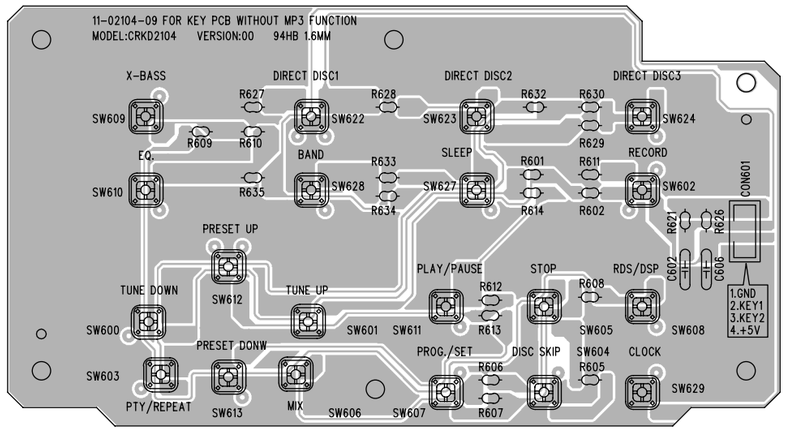
AM2080

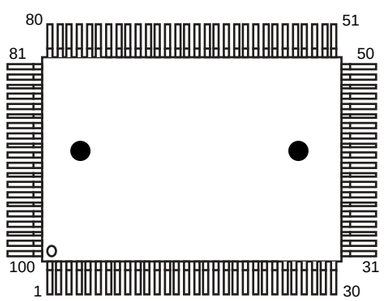


AM2180

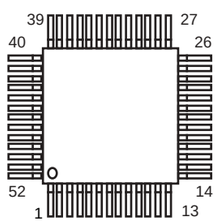


AM1580





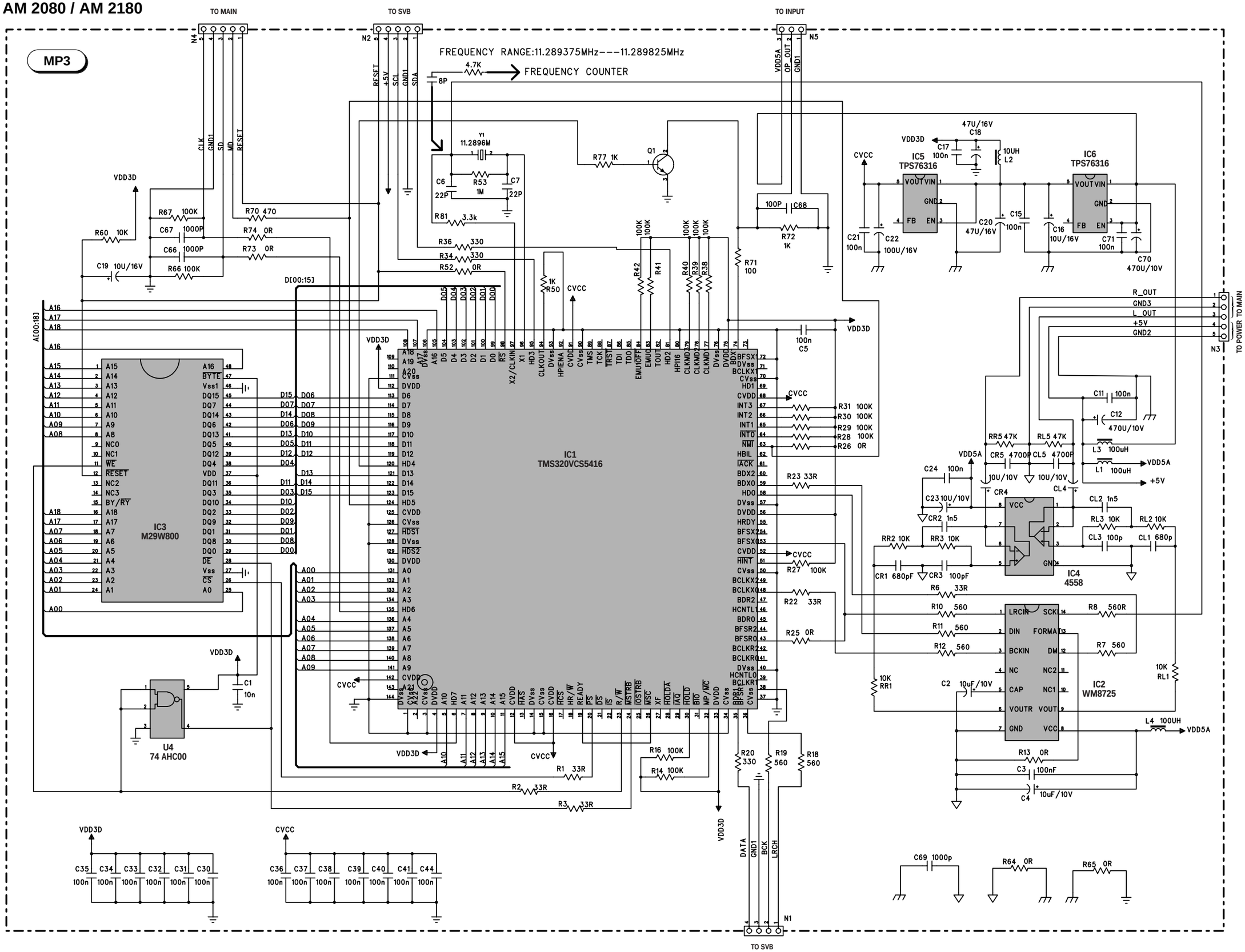
TMP87EP26F



PT6311

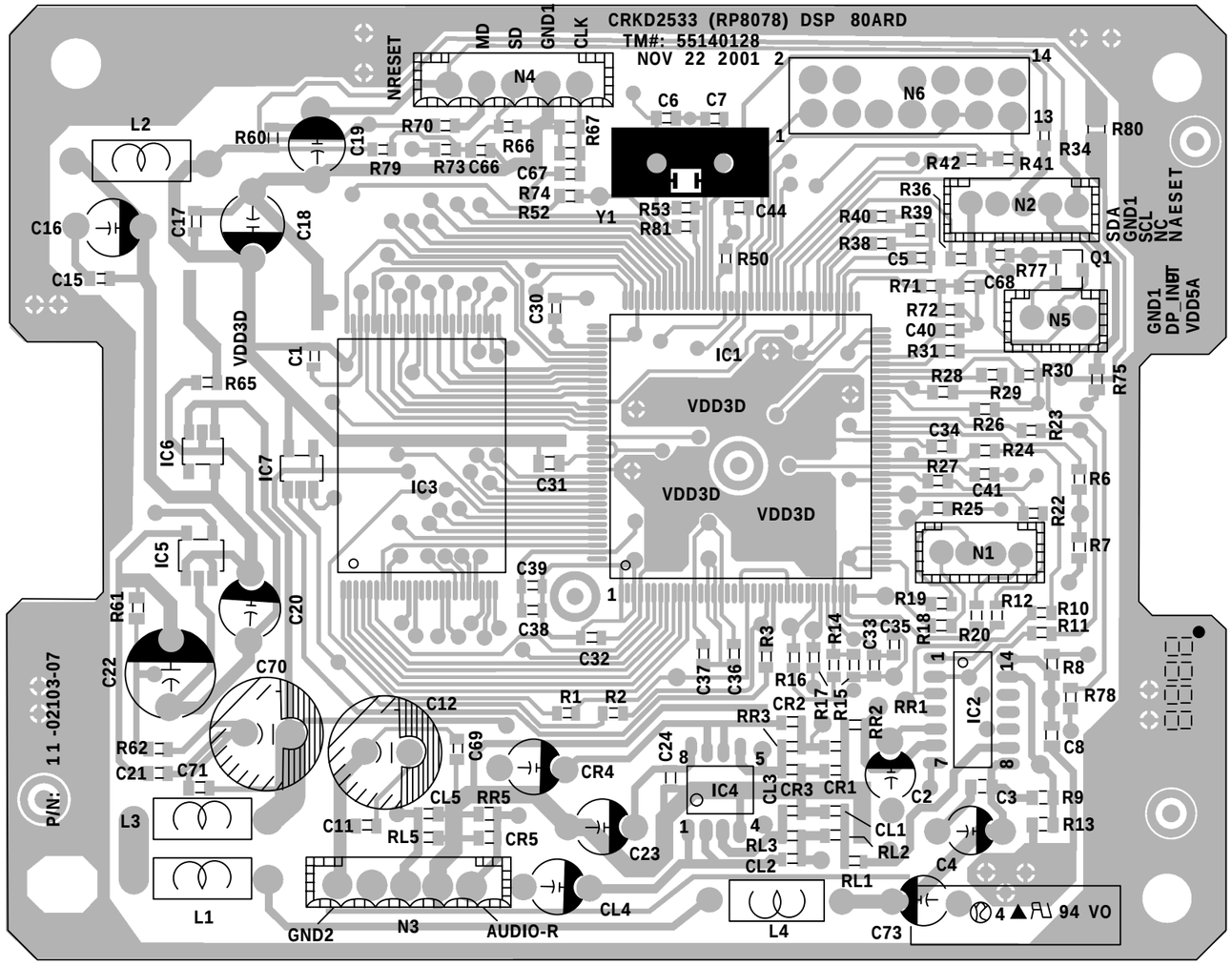
DIGITAL PROCESSING SCHEMATIC DIAGRAM - SCHEMA DU TRAITEMENT DIGITAL - SCHALTBILD DIGITALVERARBEITUNG - SCHEMA ELABORAZIONE DIGITALE - ESQUEMA DEL TRATAMIENTO DIGITAL (MP3)

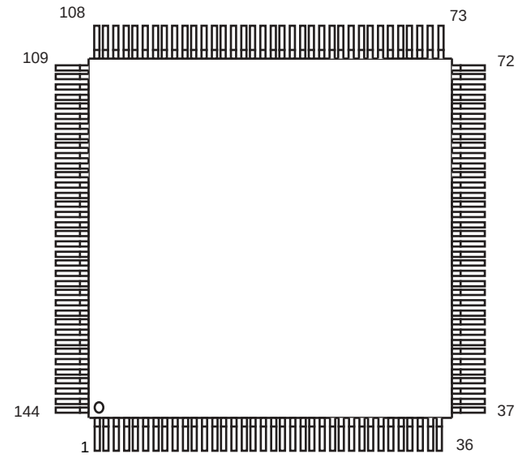
AM 2080 / AM 2180



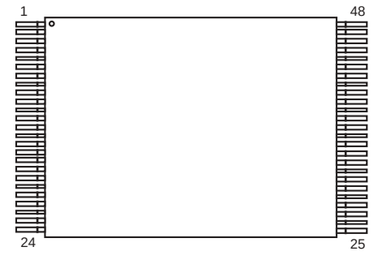
Digital processing P.C.B.
Platine traitement digital
Ltpl. Digitalverarbeitung
Piastra elaborazione digitale
Platina tratamiento digital

AM 2080 / AM 2180





TMS 320VC5416



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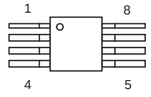
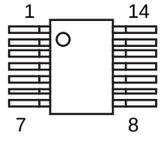
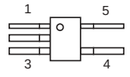


BA4558F

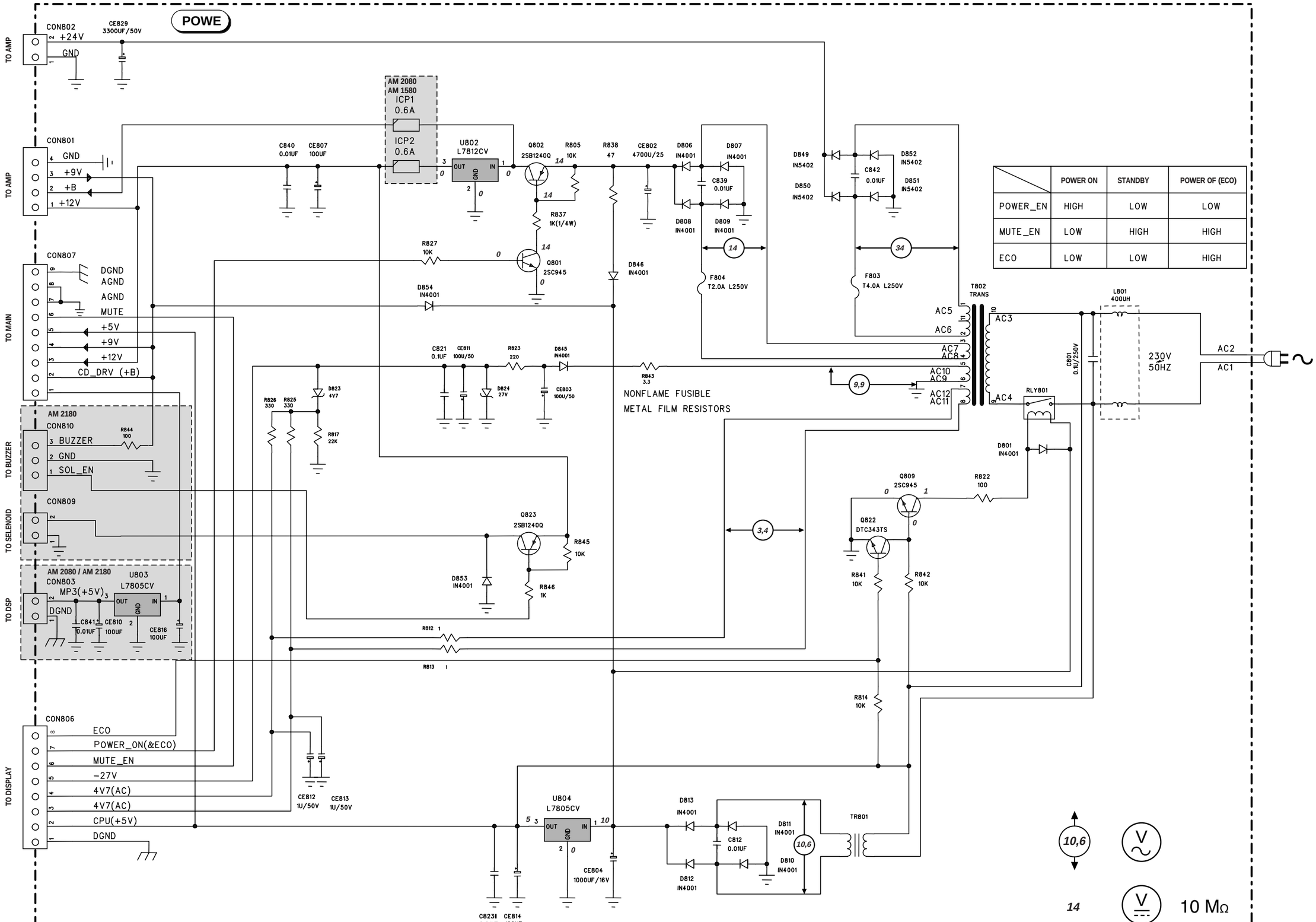


WM8725ED



TPS 76331DBVR

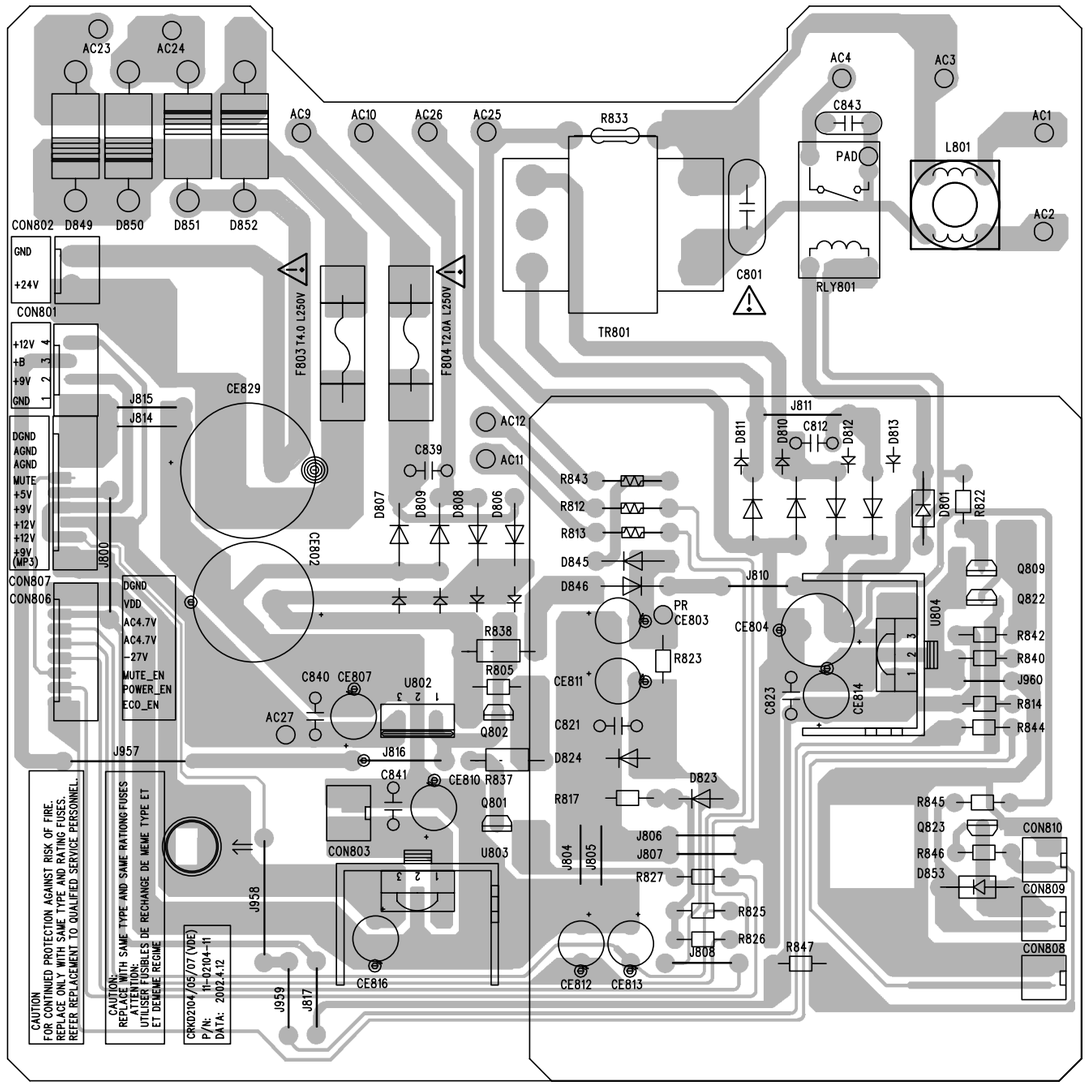
POWER SUPPLY SCHEMATIC DIAGRAM - SCHEMA DE L'ALIMENTATION - SCHALTBILD NETZTEIL - SCHEMA DELL' ALIMENTAZIONE - ESQUEMA DE LA ALIMENTACIÓN

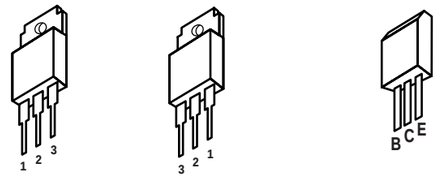


	POWER ON	STANDBY	POWER OF (ECO)
POWER_EN	HIGH	LOW	LOW
MUTE_EN	LOW	HIGH	HIGH
ECO	LOW	LOW	HIGH

Power unit P.C.B.
Platine secteur
Ltpl. Netzanschluss
Piastra di rete
Platina de red

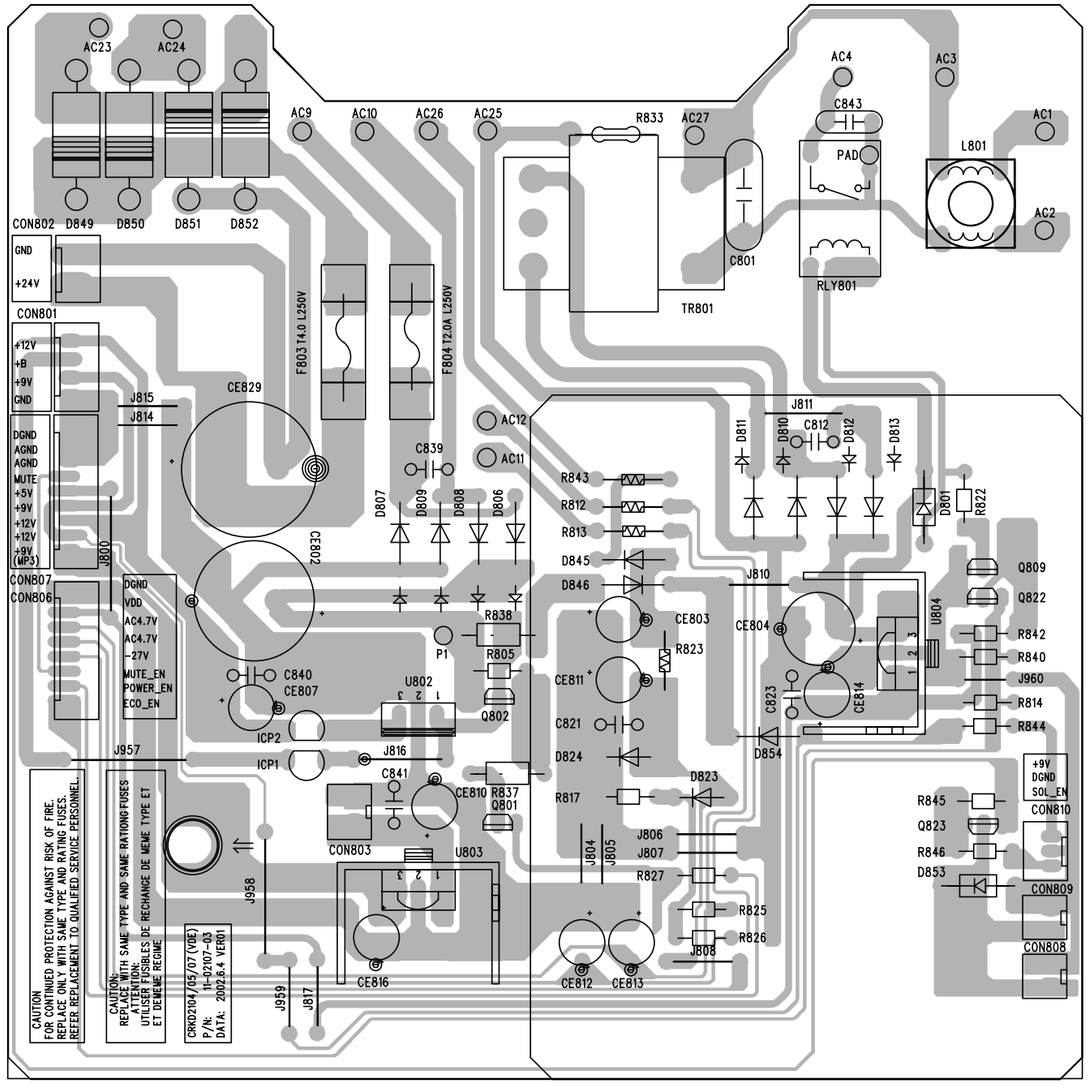
AM2080



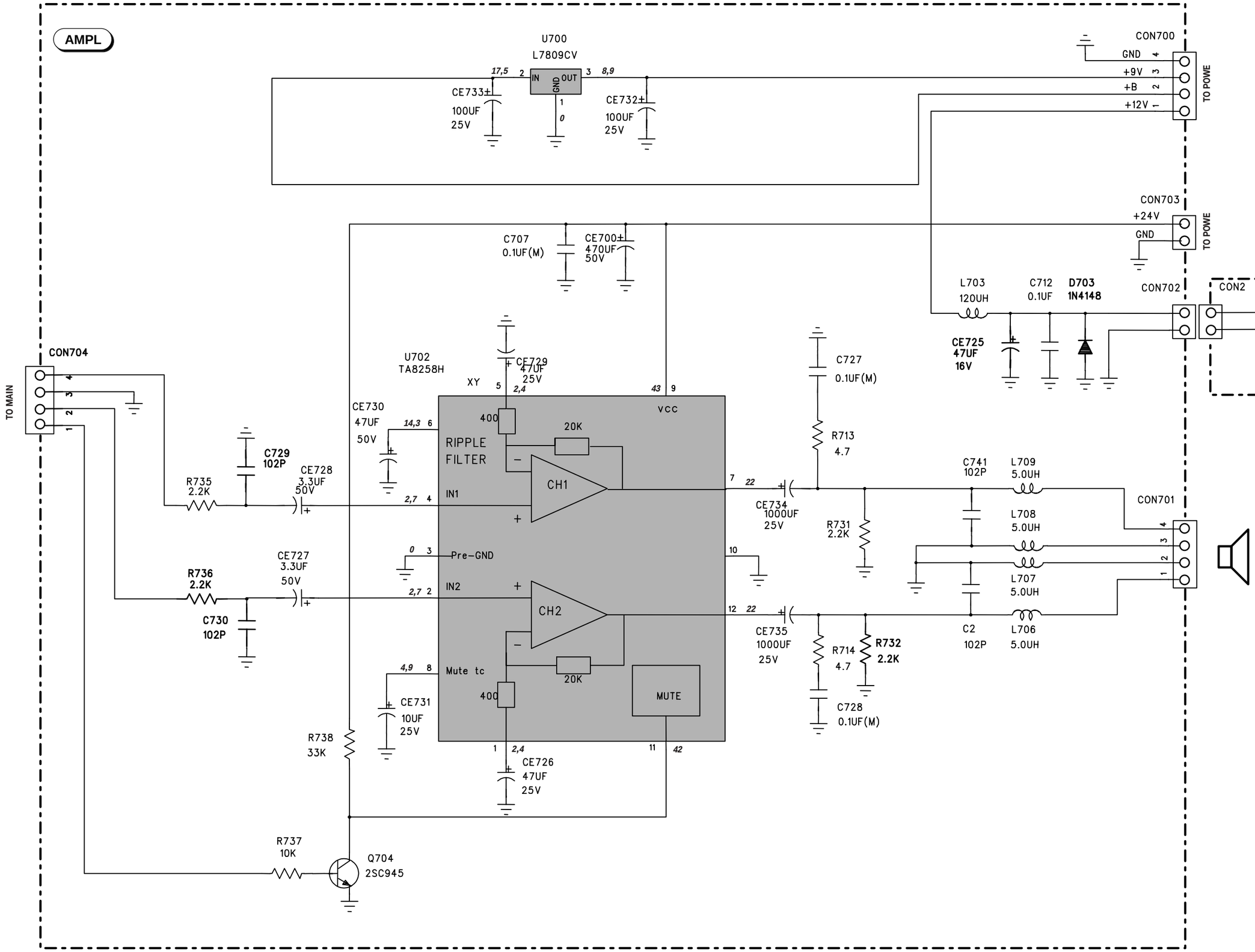


L7812CV L7805AC 2SB1243

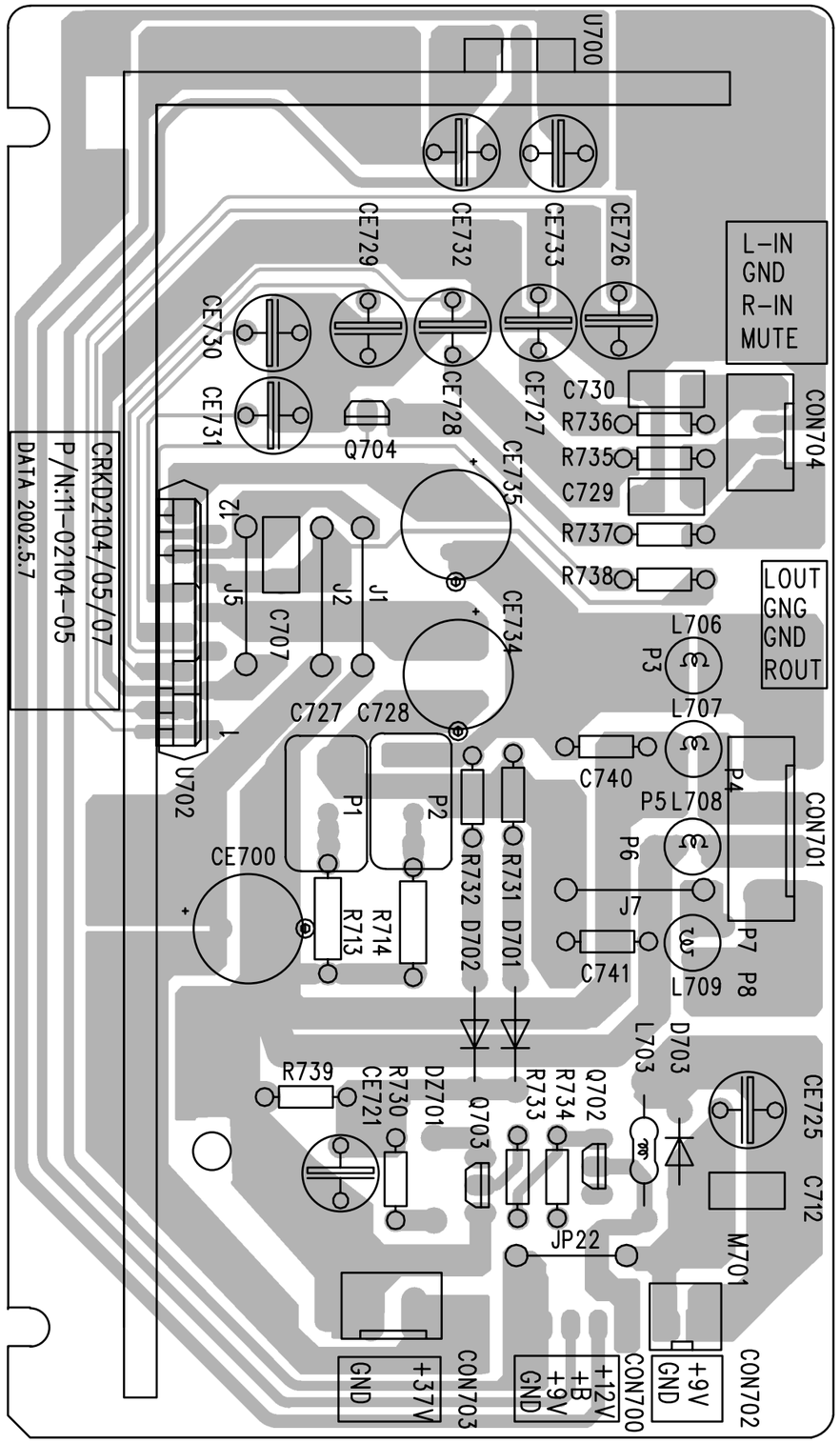
AM2180 / AM 1580



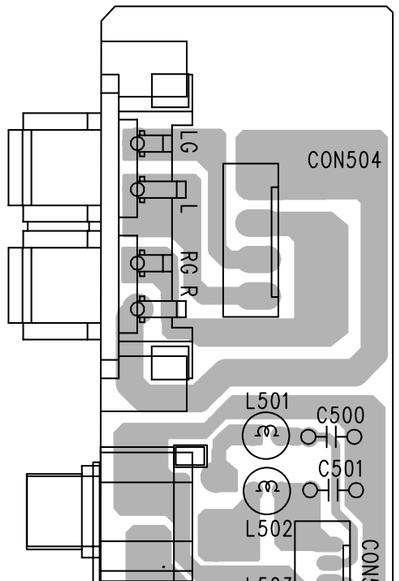
AMPLIFIER SCHEMATIC DIAGRAM - SCHEMA DE L'AMPLIFICATEUR - SCHALTBILD ENDVERSTÄRKER - SCHEMA DE L'AMPLIFICATORE - ESQUEMA DEL AMPLIFICADOR

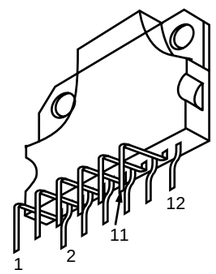


Amplifier P.C.B.
Platine amplificateur
Ltpl. Endverstärker
Piastra amplificatore
Platina amplificador

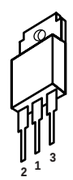


Connexion P.C.B.
Platine connexions
Anschlußplatte
Piastra connessione
Platina conexiones



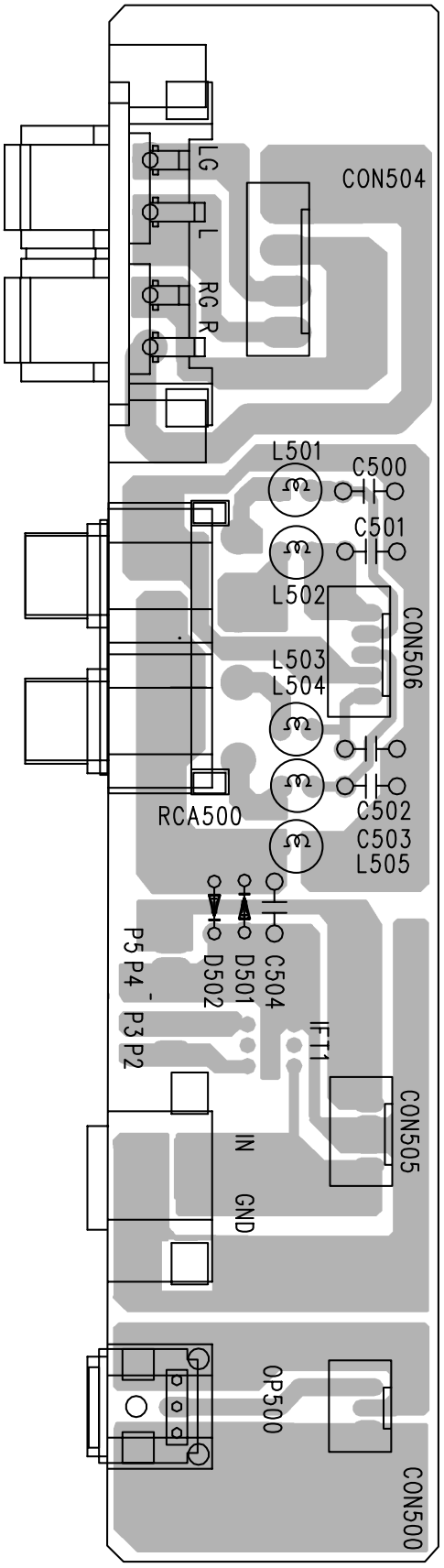


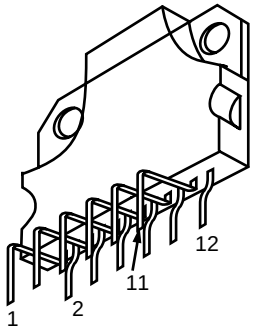
TA8258H



L7809CV

Connexion P.C.B.
Platine connexions
Anschlußplatte
Piastra connessione
Platina conexiones





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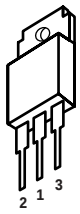
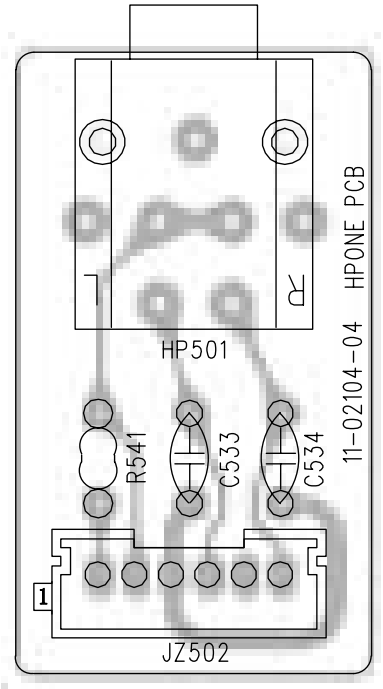
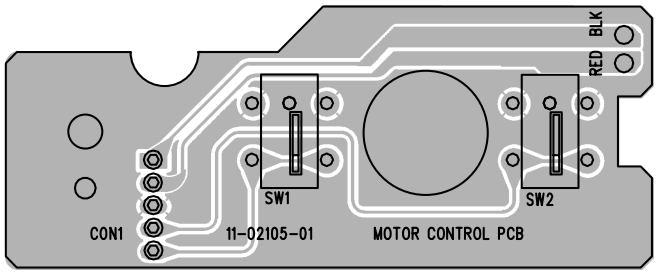


L7809CV

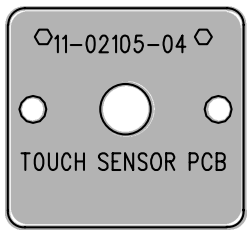
Headphone-jack P.C.B.
Platine prise-casque
Kopfhörerbuchse Ltpl.
Piastra presa per cuffia
Platina toma auriculares



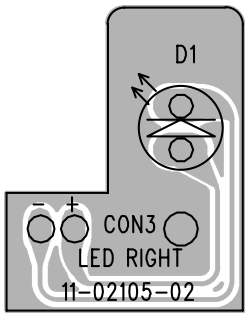
Motor control P.C.B.
Platine commande moteur
Steuerungsplatte Wechsler-Motor
Piastra comando motore
Platina mando motor



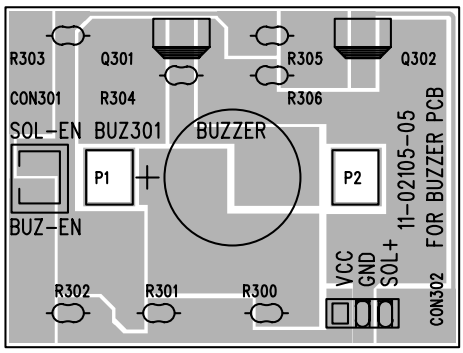
Key P.C.B.
Platine touche
Ltpl. Taste
Piastra tasto
Platina tecla



Led P.C.B.
Platine Led
Ltpl. Led
Piastra Led
Platina Led

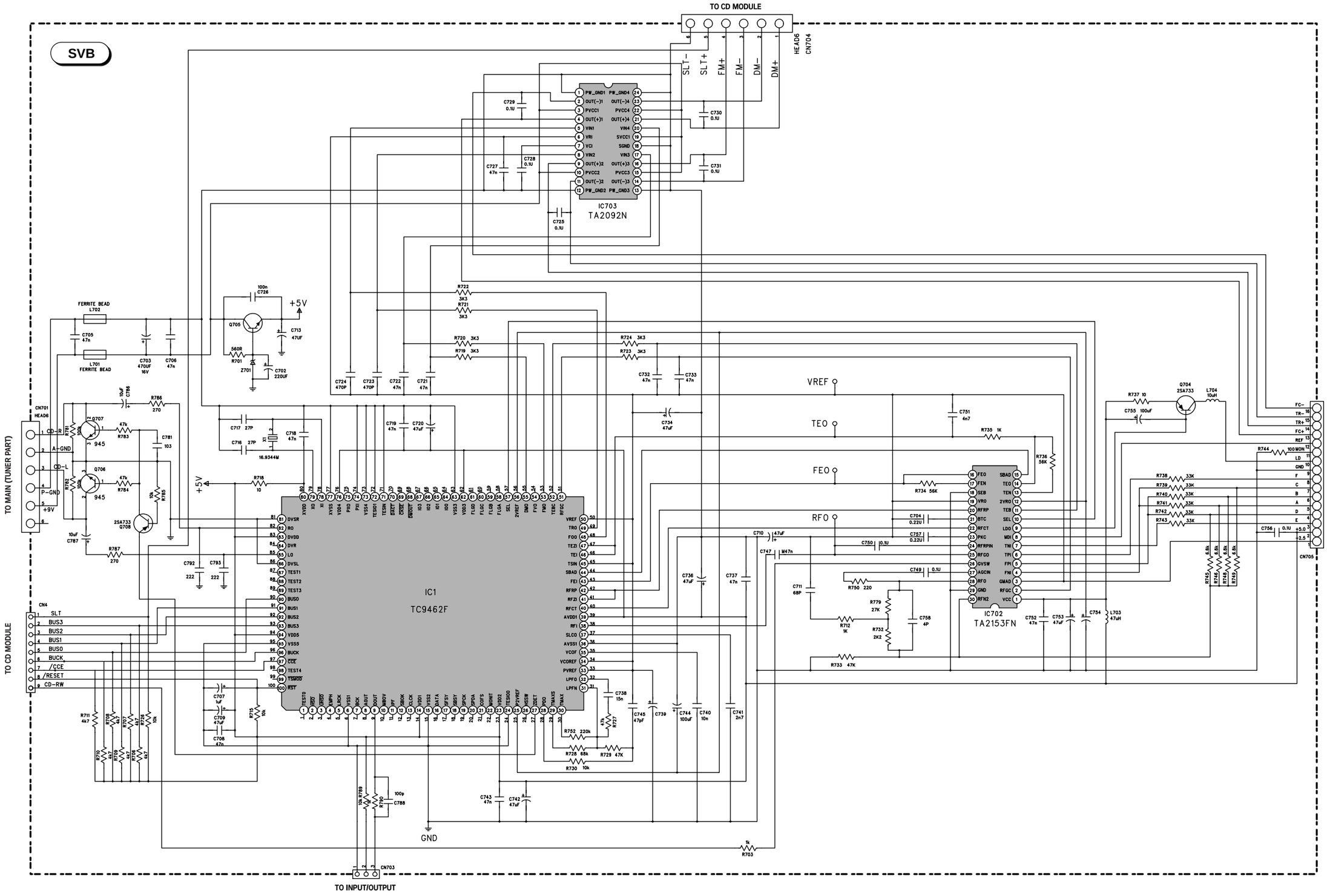


Buzzer P.C.B.
Platine Buzzer
Ltpl. Buzzer
Piastra Buzzer
Platina Buzzer



CD CONTROL MODULE SCHEMATIC DIAGRAM - SCHEMA CONTROLE MECANIQUE CD - CD ANZEIGE SCHALTBILD - SCHEMA COMANDI CD - ESQUEMA MANDOS CD

AM 1580

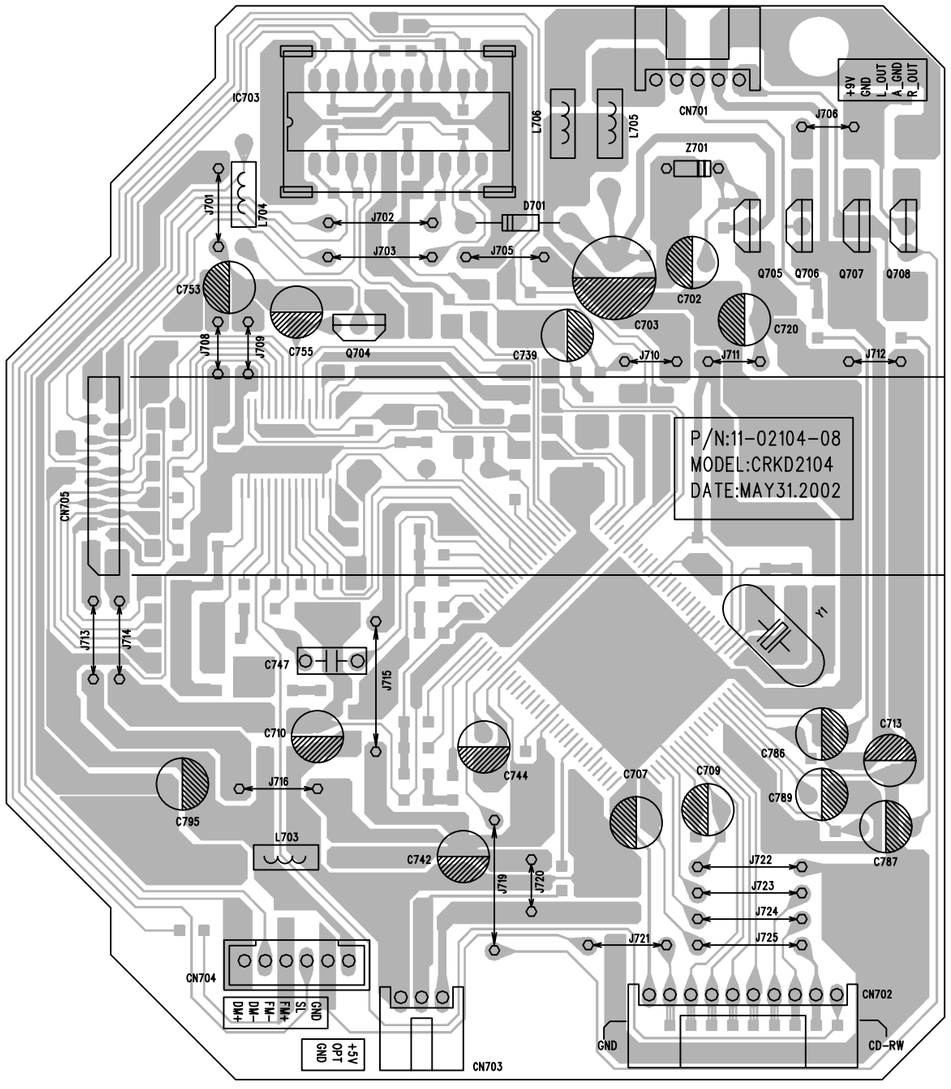


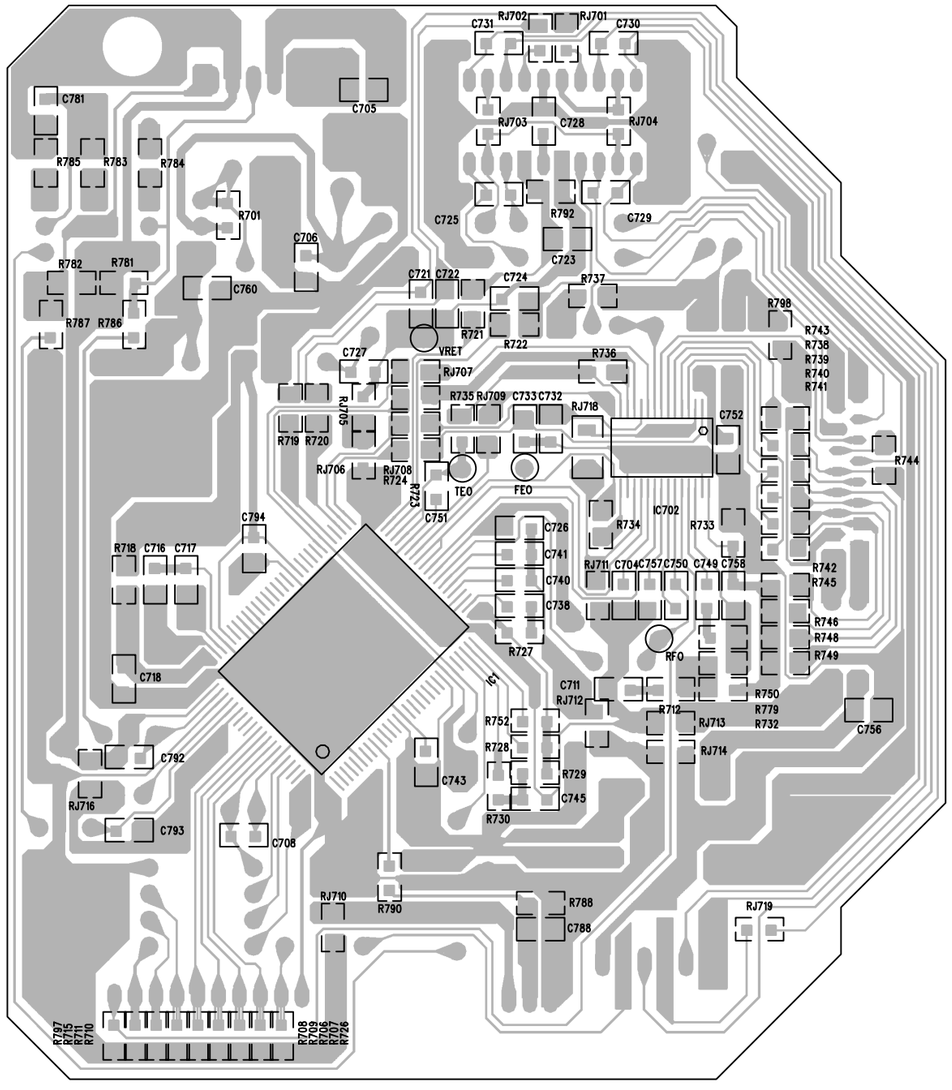
CD control P.C.B.
Platine commandes CD
Ltpl. CD Bedienteil
Piastra comandi CD
Platina de mandos CD

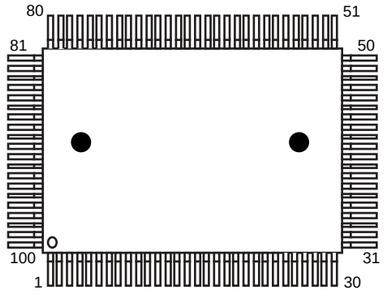
AM 1580

Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes

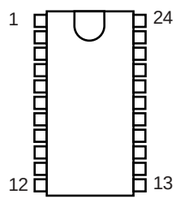
Solder side
Côté cuivre
Lötseite
Lato saldature
Lado del cobre







TC962F



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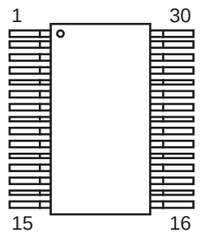
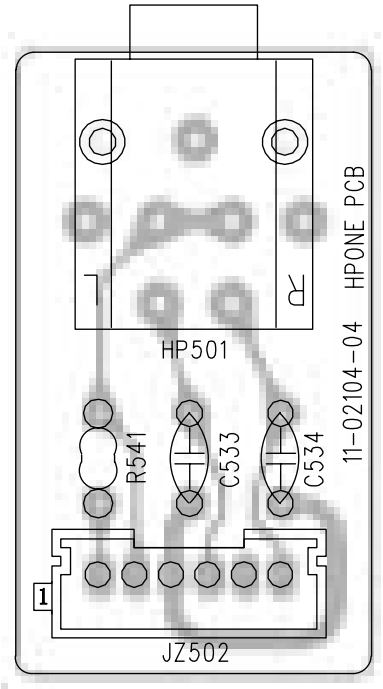
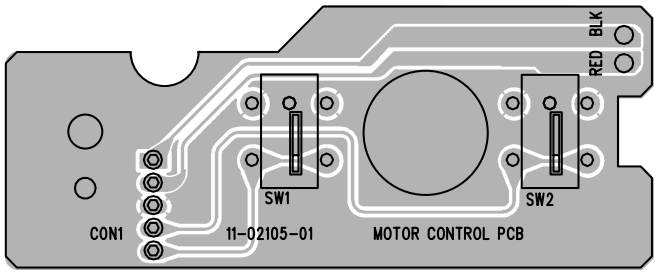


TA2153FN

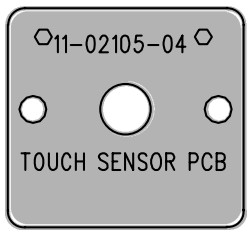
Headphone-jack P.C.B.
Platine prise-casque
Kopfhörerbuchse Ltpl.
Piastra presa per cuffia
Platina toma auriculares



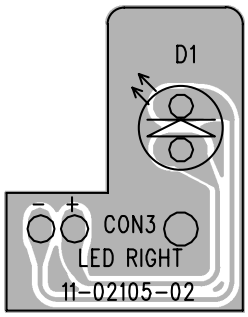
Motor control P.C.B.
Platine commande moteur
Steuerungsplatte Wechsler-Motor
Piastra comando motore
Platina mando motor



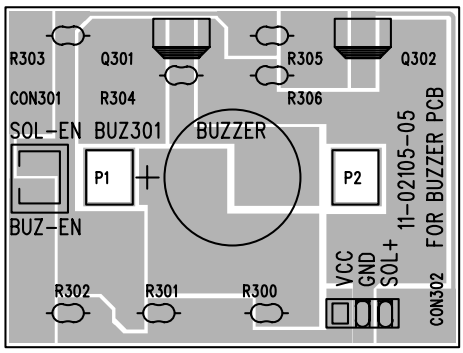
Key P.C.B.
Platine touche
Ltpl. Taste
Piastra tasto
Platina tecla



Led P.C.B.
Platine Led
Ltpl. Led
Piastra Led
Platina Led

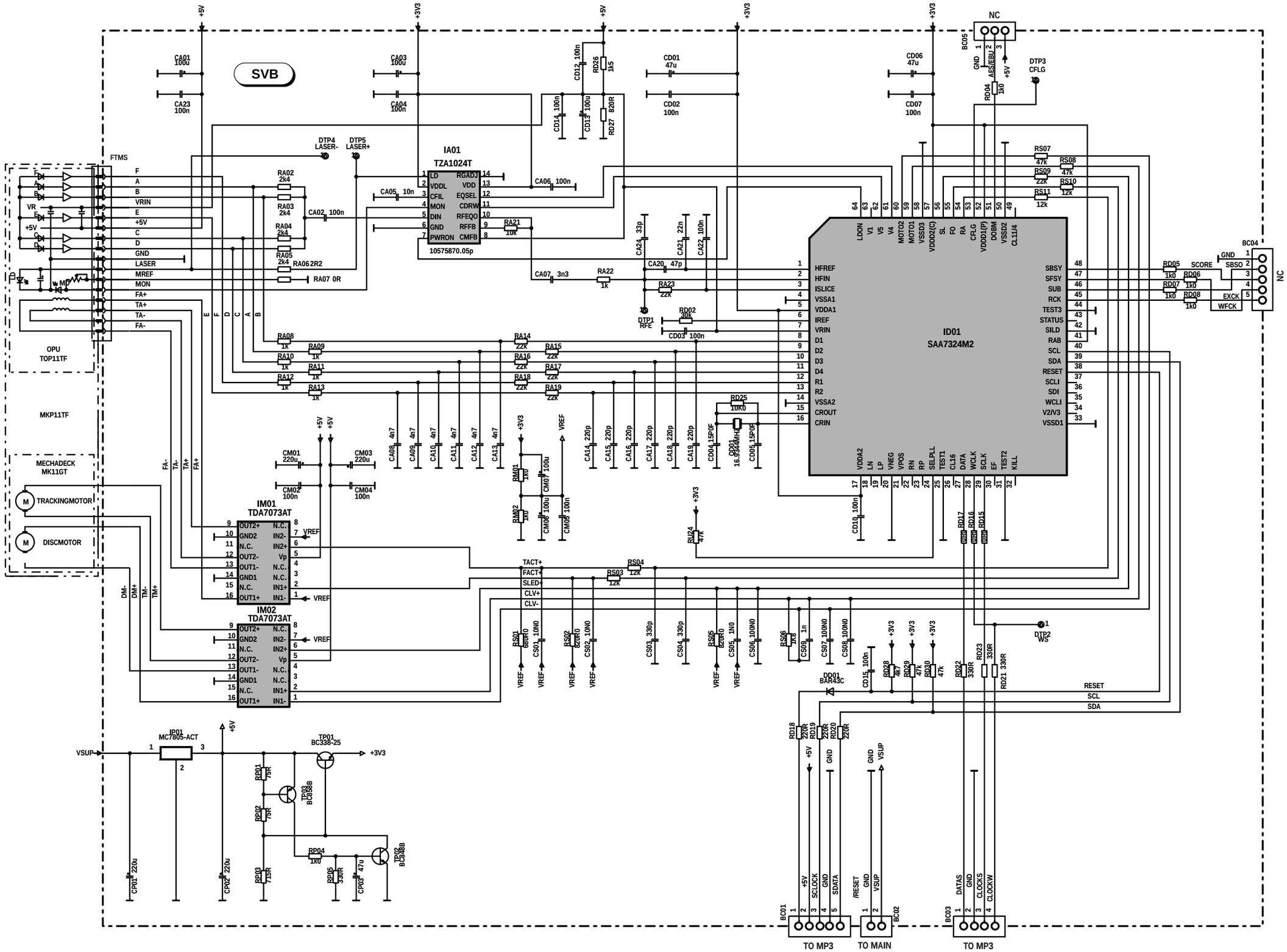


Buzzer P.C.B.
Platine Buzzer
Ltpl. Buzzer
Piastra Buzzer
Platina Buzzer



CD CONTROL MODULE SCHEMATIC DIAGRAM - SCHEMA COMMANDES CD - SCHALTBILD CD ANZEIGE - SCHEMA COMANDI CD - ESQUEMA MANDOS CD

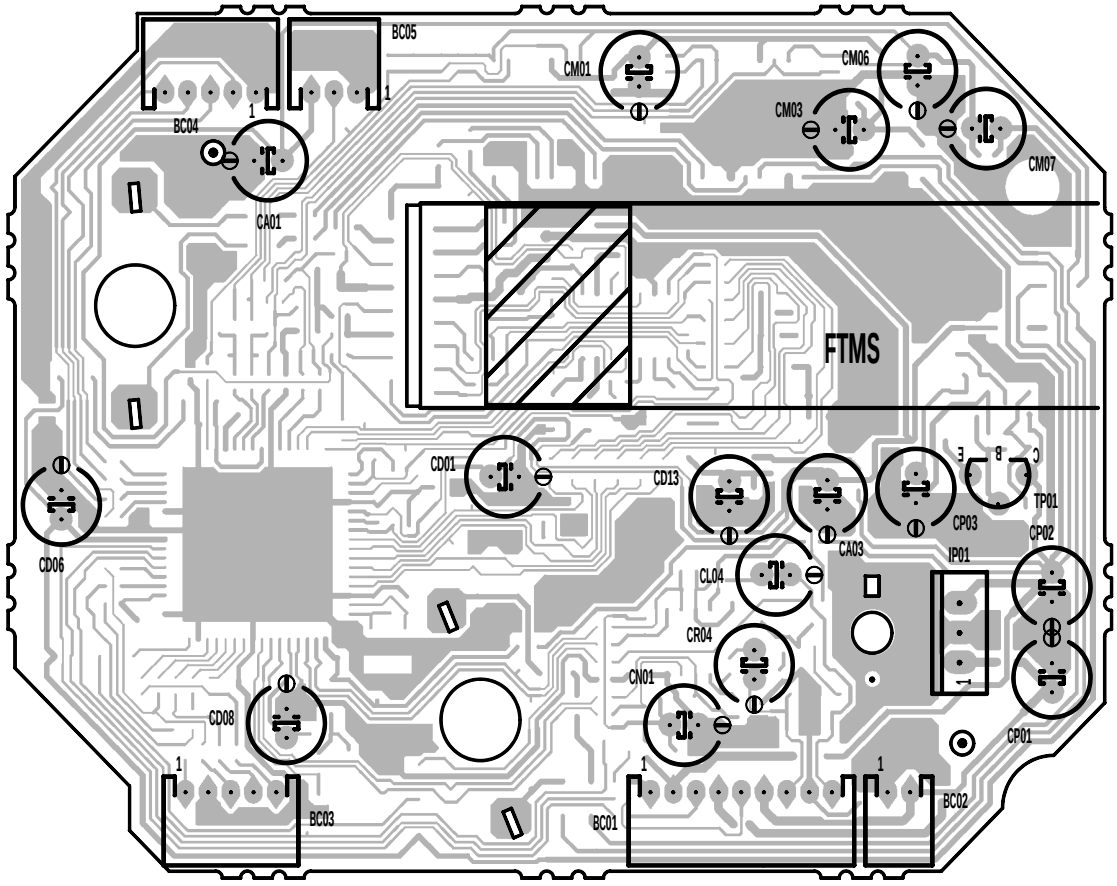
AM 2080 / AM2180



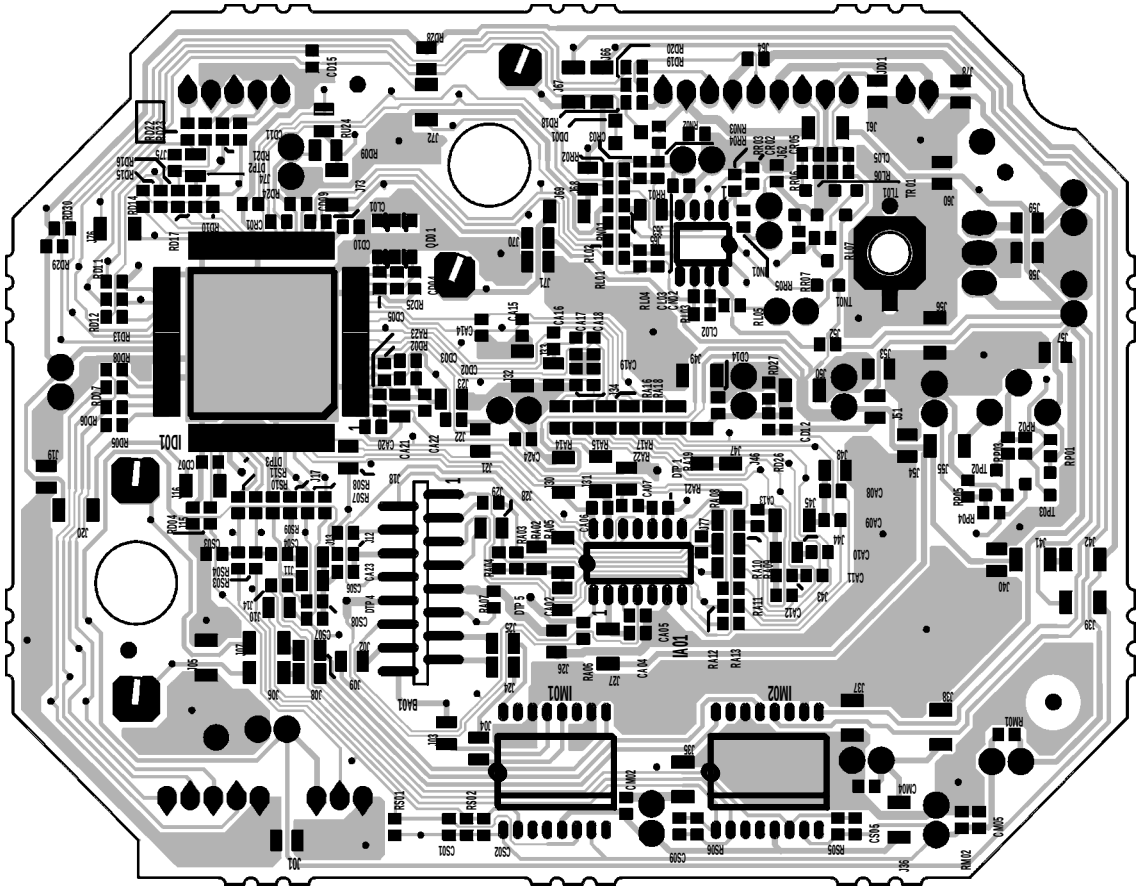
CD control P.C.B.
Platine commandes CD
Ltpl. CD Bedienteil
Piastra comandi CD
Platina de mandos CD

AM 2080 / AM2180

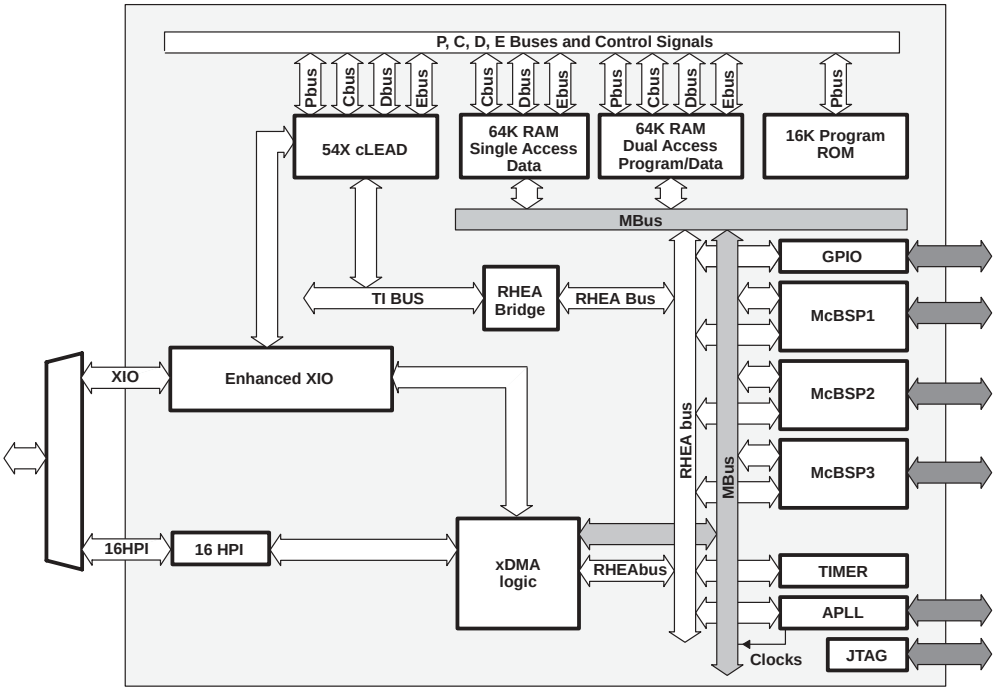
Component side
Côté composants
Bestückungsseite
Lato componenti
Lado componentes



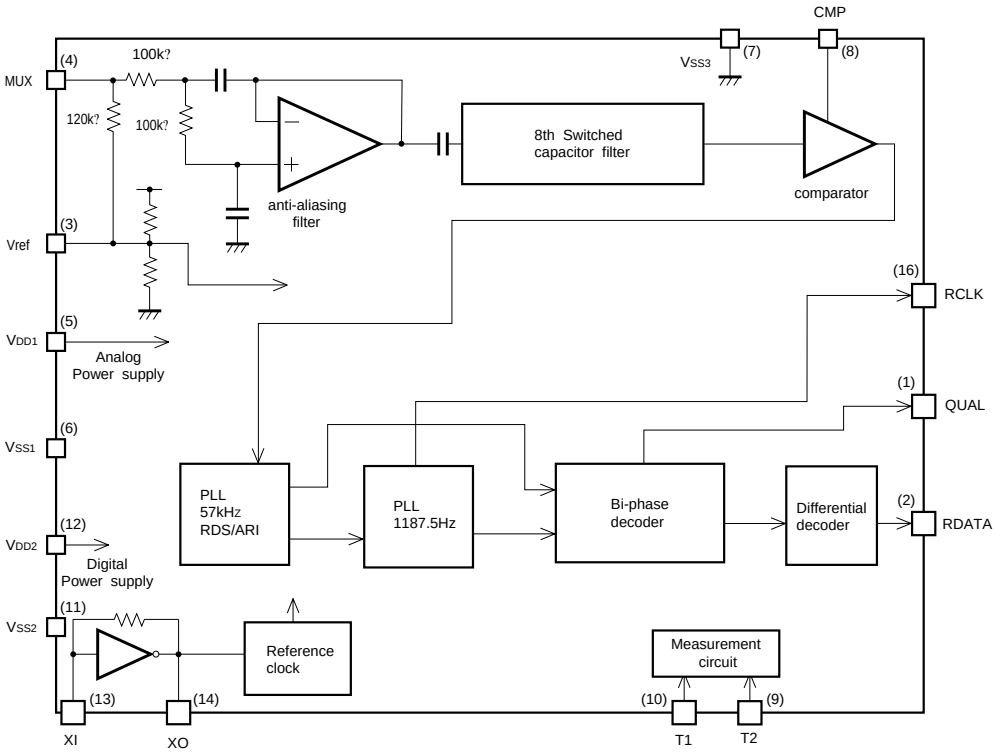
Solder side
Côté cuivre
Lötseite
Lato saldatura
Lado del cobre



IC 01 TMS320VC



IC404 BU1924



IC 03 M29W800